ARAD SANAT

TECHNICAL AND ENGINEERING COMPANY
ELECTRIC ACTUATOR MANUFACTURER

Electrical Data Sheet AP014, AP028, AP050, AP080 AP100, AP250 & AP500

Contents

1. SCOPE

This document provides guidance notes about electrical drawing information. These notes are applicable to the sizing of the following instrument equipment:

- AP014 Part-turn actuators
- AP028 Part-turn actuators
- AP050 Part-turn actuators
- AP080 Part-turn actuators
- AP100 Part-turn actuators
- AP250 Part-turn actuators
- AP500 Part-turn actuators

Any deviation from the present Calculation Notes at any stage of the project shall be subject to manufacturer approval.

2. REFERENCE DOCUMENTS

This document is complemented by the others as specified below:

- KSN 8569S310: Mechanical Datasheet
- KSN 8569S311: Technical Specification
- KSN 8569S312: Datasheet

3. ACTUATOR SIZING

The sizing of part-turn actuators body will be in accordance with KSN 8569S311.

4. QUICK ACCESS TO INFORMATION

The table below is for actuators with single-phase and 220VAC-50Hz power input. They work in C type according to EN15714-2.

Model	Operating time to 90° (s)	Course (°)	Nominal Torque (N.m)	Max. torque (N.m)	Maximum start (1/h)	Nominal Motor power (W)	Nominal current (A)	Max. current (A)	Starting current (A)	Overcurrent protection device setting (A)	Heater current (A)	IP Protection (EN60529)
AP014a	7.5	0-720	14	20	1500	3	0.1	0.2	0.7	0.2	0.1	IP68
AP028a	12	0-720	28	40	1500	3	0.1	0.2	0.7	0.2	0.1	IP68
AP050a	15	0-720	50	60	1500	3	0.1	0.2	0.7	0.2	0.1	IP68
AP080a	30	0-720	80	100	1500	3	0.1	0.2	0.7	0.2	0.1	IP68
AP100a	9	0-360	100	180	1500	50	0.8	1.2	2.2	1.2	0.2	IP68
AP250a	21	0-180	250	400	1500	50	0.8	1.2	2.2	1.2	0.2	IP68
AP500a	40	0-110	500	800	800	50	0.8	1.2	2.2	1.2	0.2	IP68

The table below is for actuators with single-phase and 24VDC power input. They work in C type according to EN15714-2.

Model	Operating time to 90° (s)	Course (°)	Nominal Torque (N.m)	Max. torque (N.m)	Maximum start (1/h)	Nominal Motor power (W)	Nominal current (A)	Max. current (A)	Starting current (A)	Overcurrent protection device setting (A)	Heater current (A)	IP Protection (EN60529)
AP014a	7.5	0-720	14	20	1500	3	0.4	0.9	1.8	0.6	1	IP68
AP028a	12	0-720	28	40	1500	3	0.4	0.9	1.8	0.6	1	IP68
AP050a	15	0-720	50	60	1500	3	0.4	0.9	1.8	0.6	1	IP68
AP080a	30	0-720	80	100	1500	3	0.4	0.9	1.8	0.6	1	IP68
AP100a	9	0-360	100	180	1500	50	1.4	5.6	12	3.8	1	IP68
AP250a	21	0-180	250	400	1500	50	1.4	5.6	12	4.2	1	IP68
AP500a	40	0-110	500	800	800	50	1.4	5.6	12	4.5	1	IP68

The table below is for actuators with single-phase and 220VAC-50Hz power input. They work in B type according to EN15714-2.

Model	Operating time to 90° (s)	Course (°)	Nominal Torque (N.m)	Max. torque (N.m)	Maximum start (1/h)	Nominal Motor power (W)	Nominal current (A)	Max. current (A)	Starting current (A)	Overcurrent protection device setting (A)	IP Protection (EN60529)
AP014b	7.5	70-110	14	20	50	3	0.1	0.2	0.7	0.2	IP68
AP028b	12	70-110	28	40	50	3	0.1	0.2	0.7	0.2	IP68
AP050b	15	70-110	50	60	50	3	0.1	0.2	0.7	0.2	IP68
AP080b	32	70-110	80	100	50	3	0.1	0.2	0.7	0.2	IP68
AP100b	9	70-110	100	180	50	50	0.8	1.2	2.2	1.2	IP68
AP250b	21	70-110	250	400	30	50	0.8	1.2	2.2	1.2	IP68
AP500b	40	70-110	500	800	30	50	0.8	1.2	2.2	1.2	IP68

The table below is for actuators with single-phase and 24VDC power input. They work in B type according to EN15714-2.

Model	Operating time to 90° (s)	Course (°)	Nominal Torque (N.m)	Max. torque (N.m)	Maximum start (1/h)	Nominal Motor power (W)	Nominal current (A)	Max. current (A)	Starting current (A)	Overcurrent protection device setting (A)	IP Protection (EN60529)
AP014b	7.5	70-110	14	20	50	3	0.3	0.9	1.8	0.6	IP68
AP028b	12	70-110	28	40	50	3	0.3	0.9	1.8	0.6	IP68
AP050b	15	70-110	50	60	50	3	0.3	0.9	1.8	0.6	IP68
AP080b	32	70-110	80	100	50	3	0.3	0.9	1.8	0.6	IP68
AP100b	9	70-110	100	180	50	50	1.3	5.6	12	3.8	IP68
AP250b	21	70-110	250	400	30	50	1.3	5.6	12	4.2	IP68
AP500b	40	70-110	500	800	30	50	1.3	5.6	12	4.5	IP68

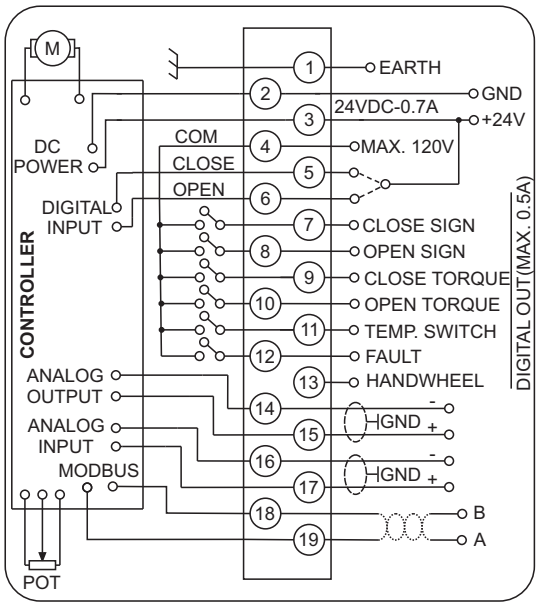
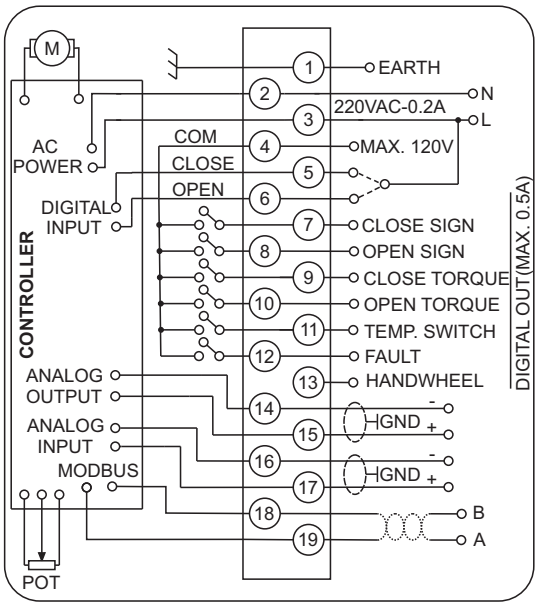
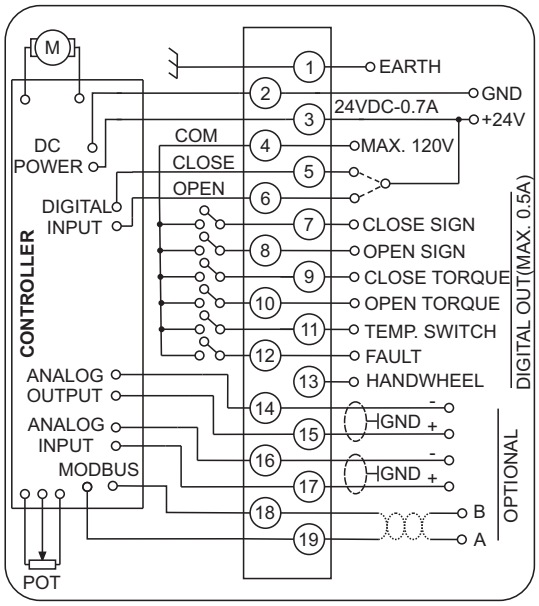
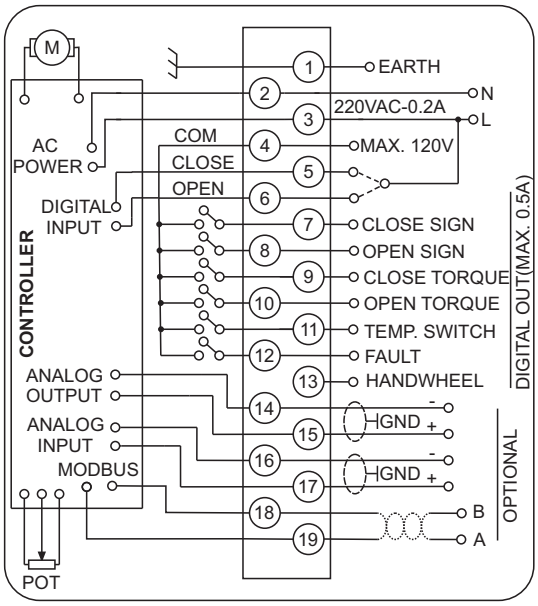
The table below is for actuators with single-phase and 220VAC-50Hz power input. They work in A type according to EN15714-2.

Model	Operating time to 90° (s)	Course (°)	Nominal Torque (N.m)	Max. torque (N.m)	Maximum start (1/h)	Nominal Motor power (W)	Nominal current (A)	Max. current (A)	Starting current (A)	Overcurrent protection device setting (A)	IP Protection (EN60529)
AP014c	7.5	70-110	14	20	50	3	0.1	0.2	0.7	0.2	IP66
AP028c	12	70-110	28	40	50	3	0.1	0.2	0.7	0.2	IP66
AP050c	15	70-110	50	60	50	3	0.1	0.2	0.7	0.2	IP66
AP080c	32	70-110	80	100	50	3	0.1	0.2	0.7	0.2	IP66
AP100c	9	70-110	100	180	50	50	0.8	1.2	2.2	1.2	IP66
AP250c	21	70-110	250	400	30	50	0.8	1.2	2.2	1.2	IP66
AP500c	40	70-110	500	800	30	50	0.8	1.2	2.2	1.2	IP66

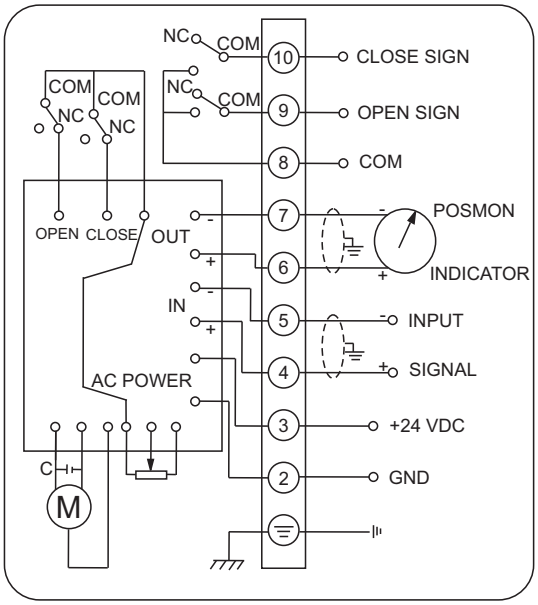
The table below is for actuators with single-phase and 24VDC power input. They work in A type according to EN15714-2.

Model	Operating time to 90° (s)	Course (°)	Nominal Torque (N.m)	Max. torque (N.m)	Maximum start (1/h)	Nominal Motor power (W)	Nominal current (A)	Max. current (A)	Starting current (A)	Overcurrent protection device setting (A)	IP Protection (EN60529)
AP014c	7.5	70-110	14	20	50	3	0.3	0.9	1.8	0.6	IP66
AP028c	12	70-110	28	40	50	3	0.3	0.9	1.8	0.6	IP66
AP050c	15	70-110	50	60	50	3	0.3	0.9	1.8	0.6	IP66
AP080c	32	70-110	80	100	50	3	0.3	0.9	1.8	0.6	IP66
AP100c	9	70-110	100	180	50	50	1.3	5.6	12	3.8	IP66
AP250c	21	70-110	250	400	30	50	1.3	5.6	12	4.2	IP66
AP500c	40	70-110	500	800	30	50	1.3	5.6	12	4.5	IP66

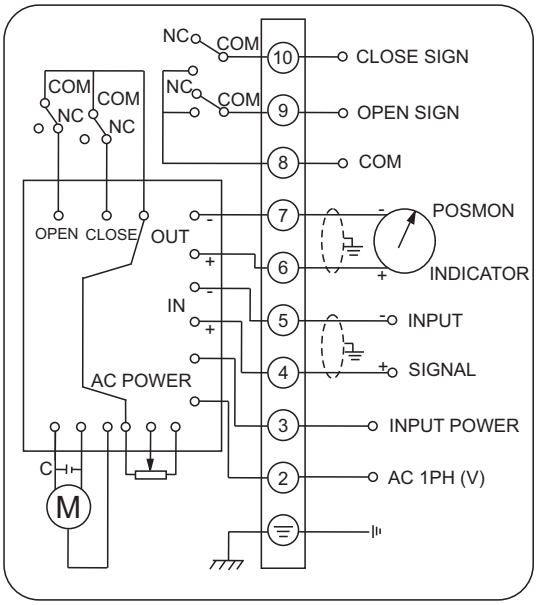
5. ELECTRICAL DRAWING

24VDC - A Type	220VAC - A Type
	
24VDC - B Type	**220VAC - B Type**
	

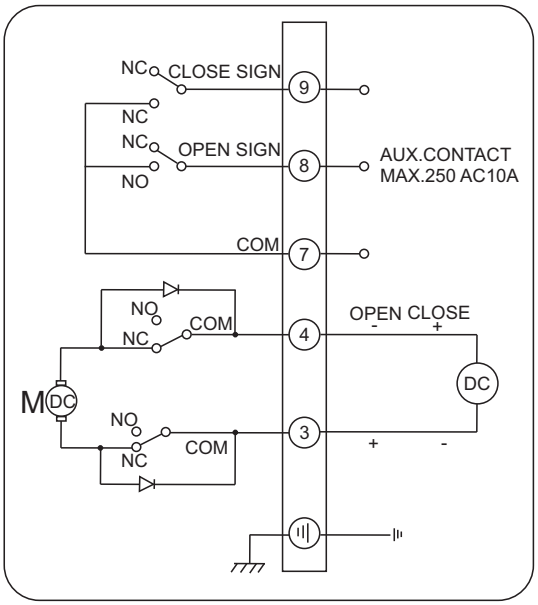
24VDC - 4-20ma - B Type



220VAC - 4-20ma - B Type



24VDC - C Type



220VAC - C Type