

Electrak® 5

230 and 400 Vac - load up to 6800 N

Ordering Key

1	2	3	4	5
A22 -	20B5 -	04	M0	BPO

1. Input voltage

A22 - = 1 × 230 Vac

A42 - = 3 × 400 Vac

2. Dynamic load capacity, screw type and maximum speed

05A5 - = 1100 N, acme, 54 mm/s¹

10A5 - = 2250 N, acme, 30 mm/s

20A5 - = 2250 N, acme, 15 mm/s

05B5 - = 2250 N, ball, 61 mm/s

10B5 - = 4500 N, ball, 30 mm/s

20B5 - = 4500 N, ball, 15 mm/s

21B5 - = 6800 N, ball, 15 mm/s

3. Stroke

04 = 4 inch (101,6 mm)

06 = 6 inch (152,4 mm)

08 = 8 inch (203,2 mm)

10 = 10 inch (254,0 mm)

12 = 12 inch (304,8 mm)

14 = 14 inch (355,6 mm)

16 = 16 inch (406,4 mm)

18 = 18 inch (457,2 mm)

20 = 20 inch (508,0 mm)

24 = 24 inch (609,6 mm)

4. Rear adapter hole position²

M0 = adaptor at 0° (standard position)

M1 = adaptor at 30°

M2 = adaptor at 60°

M3 = adaptor at 90°

M4 = adaptor at 120°

M5 = adaptor at 150°

5. Options³

N = no option

B = anti coast brake³

NPO = potentiometer

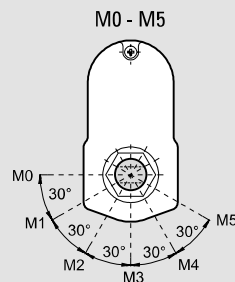
NHW = manual override⁴

BPO = anti coast brake and potentiometer³

BHW = anti coast brake and manual override^{3/4}

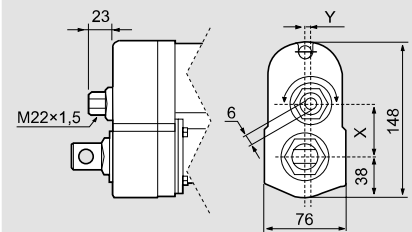
¹05A5 - not possible with 400 Vac input voltage.

²Definition of rear adapter hole positions.



³Ball screw versions must always be ordered with an anti coast brake while acme versions can be ordered with or without an anti coast brake.

⁴Dimensions for manual override option.



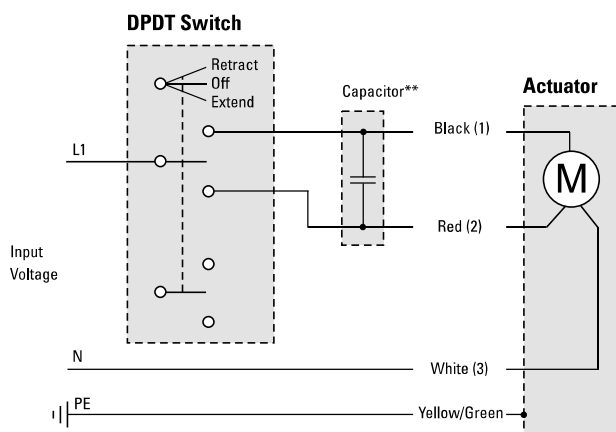
Model	X	Y
05A(B)5 -	49,6	0,0
10A(B)5 -	43,3	5,2
20(21)A(B)5 -	38,9	0,0

Electrak® 5

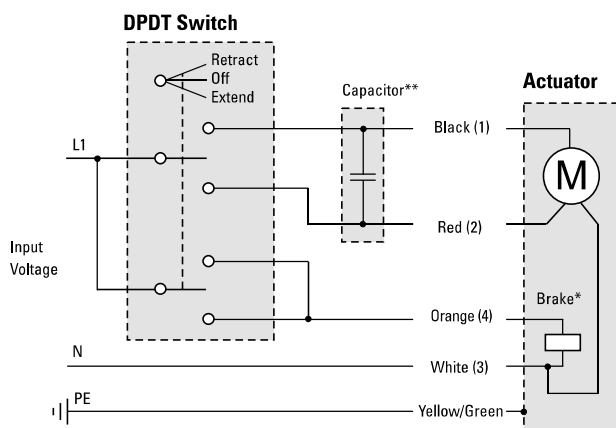
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Wiring Diagram - 1 × 230 Vac

Without anti coast brake*



With anti coast brake*



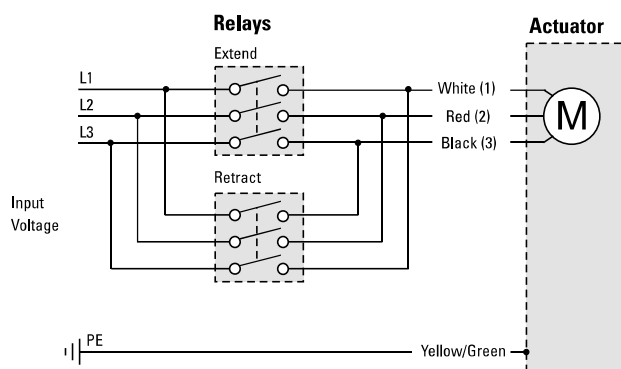
* Anti coast brake is standard on Electrak 5 / LA24 for ball screw models and optional for acme screw models. On DMA there are no anti coast brake on acme models while ball screw models always are equipped with an anti coast brake.

** 10 µF capacitor required to run the actuator, p/n 9200-448-003.

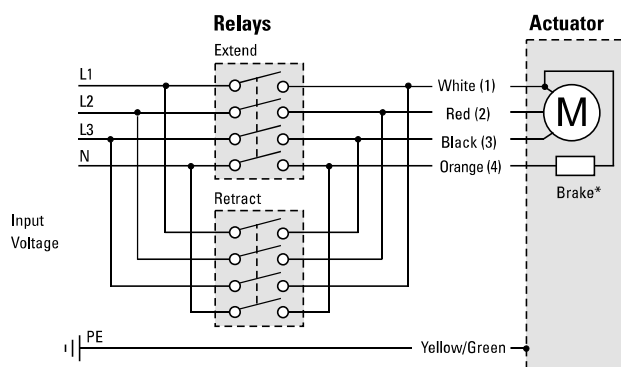
Leads can be either color or number marked. Connect black (1) lead to L1 and white (3) lead to N (neutral) to retract the actuator. Change L1 from lead black (1) to lead red (2) to extend the actuator. If the actuator is equipped with an anti coast brake, release the brake by connecting orange (4) lead lead to L1.

Wiring Diagram - 3 × 400 Vac

Without anti coast brake*



With anti coast brake*



* Anti coast brake is optional on Electrak 5 / LA24 on both acme and ball screw models. On DMA there are no anti coast brake on acme models while ball screw models always are equipped with an anti coast brake.

Leads can be either color or number marked. Connect white (1) lead to L1, red (2) lead to L2 and black (3) lead to L3 to extend the actuator. Change the places of white (2) lead and black (3) to retract the actuator. If the actuator is equipped with an anti coast brake, release the brake by connecting orange (4) lead lead to N (neutral).

Electrak® LA24

230 and 400 Vac - load up to 6800 N



Standard Features and Benefits

- Robust, strong and reliable
- Corrosion free aluminium cover tube
- Stainless steel extension tube
- Acme or ball screw models
- Rugged and robust
- Withstands very harsh environments
- Trunnion mounting possible
- Overload clutch for mid and end of stroke protection
- T-slot grooves in the cover tube for magnetic sensors
- Heavy duty motor with thermal switch
- Anti-coast brake for repeatable positioning on all ball screw models. Optional on acme screw models.
- Maintenance free

General Specifications

Parameter	Electrak LA24
Screw type	acme or ball
Internally restrained	yes
Manual override	no, optional
Dynamic braking	no
Holding brake acme screw models ball screw models	no, self-locking yes
End of stroke protection	overload clutch
Mid stroke protection	overload clutch
Motor protection	auto reset thermal switch
Motor connection	cable
Motor connector	no
Certificates	UL, CSA, CE
Options	<ul style="list-style-type: none"> • potentiometer • manual override

Performance Specifications

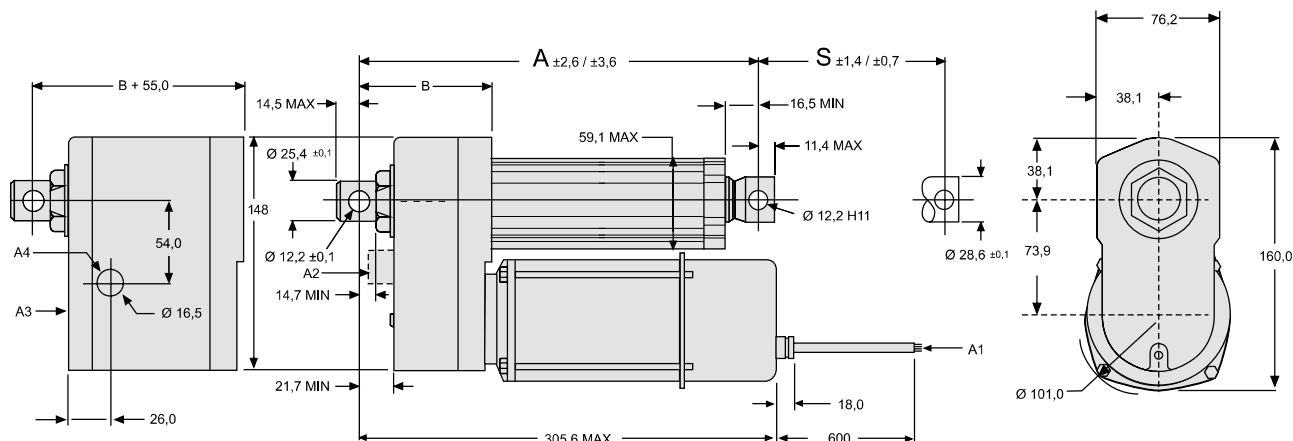
Parameter	Electrak LA24
Maximum load, dynamic / static AA •• -05A65M (acme screw)* AA •• -10A65M (acme screw) AA •• -20A65M (acme screw) AA •• -05B65M (ball screw) AA •• -10B65M (ball screw) AA •• -20B65M (ball screw) AA •• -21B65M (ball screw)	[N] 1100 / 11350 2250 / 11350 2250 / 11350 2250 / 18000 4500 / 18000 4500 / 18000 6800 / 18000
Speed, at no load / at maximum load AA •• -05A65M (acme screw)* AA •• -10A65M (acme screw) AA •• -20A65M (acme screw) AA •• -05B65M (ball screw) AA •• -10B65M (ball screw) AA •• -20B65M (ball screw) AA •• -21B65M (ball screw)	[mm/s] 48 / 38 30 / 18 15 / 12 61 / 37 30 / 19 15 / 12 15 / 11
Available input voltages Single phase Three phase	[Vac] 230** 400
Input frequency 1 × 230 Vac model 3 × 400 Vac model	[Hz] 50/60 50
Standard stroke lengths	[inch] 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600
Operating temperature limits	[°C] -25 – +65
Full load duty cycle @ 25 °C	[%] 25
Maximum on time	[s] 45
End play, maximum	[mm] 1,0
Restraining torque	[Nm] 0
Lead cross section	[mm ²] 1,5
Cable length	[mm] 600
Protection class	IP45

* Not possible with 400 Vac input voltage.

** 10 µF capacitor required to run the actuator, p/n 9200-448-003

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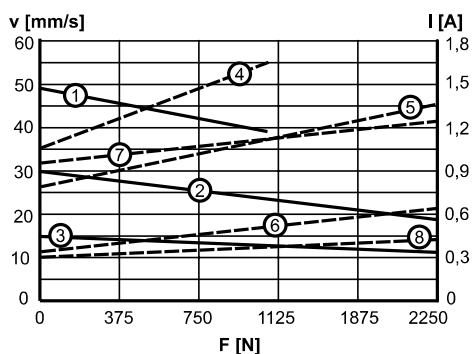
S: stroke, tolerance acme / ball screw
 A: retracted length, tolerance acme / ball screw
 A1: cable
 A2: manual override input (optional)
 A3: housing dimensions for potentiometer option
 A4: potentiometer cable output, cable length = min. 500 mm
 B: 86,1 mm

Stroke (S)	[mm]	50	100	150	200	250	300	350	400	450	500	550	600
Retracted length, acme screw models (A)	[mm]	216,7	266,7	316,7	366,7	416,7	466,7	566,7	616,7	666,7	716,7	766,7	816,7
Retracted length, ball screw models (A)	[mm]	269,6	319,6	369,6	419,6	469,6	519,6	619,6	669,6	719,6	769,6	819,6	869,6
Add on length for potentiometer*	[mm]	55,0	55,0	55,0	55,0	55,0	55,0	55,0	55,0	55,0	55,0	55,0	55,0
Weight, acme screw models	[kg]	6,0	6,2	6,4	6,6	6,8	7,0	7,3	7,5	7,7	7,9	8,1	8,3
Weight, ball screw models	[kg]	6,8	7,0	7,2	7,4	7,6	7,8	8,1	8,3	8,5	8,7	8,9	9,1
Add on weight for potentiometer*	[kg]	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3
Potentiometer resistance change*	[ohm/mm]	39	39	39	39	39	20	20	20	20	20	10	10

* Potentiometer is optional (NPO, BPO option)

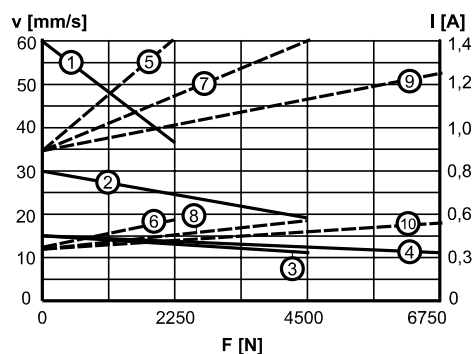
Performance Diagrams

Acme Screw Models
Speed and Current vs. Load



V: speed
 I: current
 F: load
 1: speed AA22-05A65M
 2: speed AA••-10A65M
 3: speed AA••-20A65M
 4: current 230 Vac, AA22-05A65M
 5: current 230 Vac, AA22-10A65M
 6: current 400 Vac, AA42-10A65M
 7: current 230 Vac, AA22-20A65M
 8: current 400 Vac, AA42-20A65M

Ball Screw Models
Speed and Current vs. Load



V: speed
 I: current
 F: load
 1: speed AA22-05B65M, AA42-05B65M
 2: speed AA22-10B65M, AA42-10B65M
 3: speed AA22-20B65M, AA42-20B65M
 4: speed AA22-21B65M, AA42-21B65M
 5: current 230 Vac, AA22-05B65M
 6: current 400 Vac, AA42-05B65M
 7: current 230 Vac, AA22-10B65M, AA42-20B65M
 8: current 400 Vac, AA42-10B65M, AA42-20B65M
 9: current 230 Vac, AA22-21B65M
 10: current 400 Vac, AA42-21B65M