baelz automatic

Technical Specifications and Operating Instructions TS + OI baelz 373-E62

Bälz-electrodyn

Actuator for control operation Linear motorized actuator baelz 373-E62

Technical design

- Microcontroller controlled by automatic alignment during commissioning
- Actuator status visible by LED display
- Signal processing by a wear-resistant position measuring system via Hall sensors
- Captive storage of the stroke in the EEPROM
- Broken-wire detection in 2 ... 10 VDC- and 2 ... 4 mA-operation
- Cover can be set in four different positions, 90° locking, no screws required
- Safety position when switching a binary signal (anti-freeze protection)
- Integrated, self-regulating actuator heating
- Disengaging manual operation with feedback signal
- Error detection in continuous operation (when blocked due to extraneous influences)
- Input signal Y and output signal X can be inverted independently of each other
- Activation adjustable on site: 3-point- or continuous control
- Hysteresis adjustable on site: 0.05 V / 0.15 V / 0.3 or 0.5 V in continuous operation
- Actuator with protective insulation with 230 VAC no protective conductor (PE) required

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Fig. 1 baelz 373-E62

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Technical Specifications and Operating Instructions TS +OI baelz 373-E62

1. Actuator baelz 373-E62

| .1 Technical Data | | Ø135 ≈ |
|--|---|-------------------|
| Linear motorized actuator | baelz 373-E62-100-60 with manual operation | |
| incl. yoke, coupling and m | | |
| yoke: | optionally: S51 standard yoke or S52 large yoke | |
| thrust: | 10000 N | |
| actuator speed: | 60 mm/min. | |
| protection class: | IP 54 | |
| ambient temperature: | -10°C +60°C | |
| stroke: | max. 80 mm | ╎└┰╵╜╵┰┤ |
| power supply optionally: | 230 V, 115 V, 24 V, 50 / 60 Hz | |
| power consumption: | at $230 \text{ V} = 63 \text{ VA}$ | |
| power consumption. | at 230 V = 03 VA at 115 V = 63 VA | |
| | at 24 V = 50 VA | |
| net weight: | 11,5 kg | |
| input signal ^{1.)} : | 3-point; 0(2) 10 VDC; 0(4) 20mA | |
| output signal ^{1.)} : | 0 10 VDC | |
| hysteresis ^{2.)} : | 0,05; 0,15; 0,3; 0,5 | |
| resolution: | mechanical 0,05 mm | |
| operation mode: | S3 - 30 % ED c/h 1200 EN 60034-1 | ╵┶┼┼┷┙ |
| final position control: | load-dependent | |
| Accessories: | ioau ucpenuent | |
| Protection class: | IP 65 | |
| Limit switch unit: | 2 switches (WE1 / WE2), potential-free, infinitely variable | 150 |
| | nominal load: 8 A / 250 VAC; 8 A / 30 VAC | Fig. 2 Actuato |
| | switch voltage: max. 400 VAC / max. 125 VDC | baelz 373-E62-S5 |
| | Switch voltage. Max. 400 VAC / Max. 125 VDC | |
| Reard for output signal: | X = O(4) 20mA | with standard vol |
| Board for output signal: | X=0(4) 20mA | with standard yol |
| Linear motorized actuator | baelz 373-E62-150-30 with manual operation | |
| | baelz 373-E62-150-30 with manual operation | |
| Linear motorized actuator | baelz 373-E62-150-30 with manual operation | |
| Linear motorized actuator incl. yoke, coupling and m | baelz 373-E62-150-30 with manual operation ounting screws | |
| Linear motorized actuator incl. yoke, coupling and m yoke: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C +50°C | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C +50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1.}): | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1.)} : output signal ^{1.)} : | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10° C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1,1} : output signal ^{1,1} : hysteresis ^{2,1} : | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC 0,05; 0,15; 0,3; 0,5 | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1,)} : output signal ^{1,)} : hysteresis ^{2,)} : resolution: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC 0,05; 0,15; 0,3; 0,5 mechanical 0,05 mm | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1,)} : output signal ^{1,)} : hysteresis ^{2,)} : resolution: operation mode: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC 0,05; 0,15; 0,3; 0,5 mechanical 0,05 mm S3 - 30 % ED c/h 1200 EN 60034-1 | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1,)} : output signal ^{1,)} : hysteresis ^{2,)} : resolution: operation mode: final position control: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC 0,05; 0,15; 0,3; 0,5 mechanical 0,05 mm | |
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| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1,)} : output signal ^{1,)} : hysteresis ^{2,)} : resolution: operation mode: final position control: Accessories: Protecion class: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC 0,05; 0,15; 0,3; 0,5 mechanical 0,05 mm S3 - 30 % ED c/h 1200 EN 60034-1 | |
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| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1,)} : output signal ^{1,)} : hysteresis ^{2,)} : resolution: operation mode: final position control: Accessories: Protecion class: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 $-10^{\circ}C \dots + 50^{\circ}C$ max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC 0,05; 0,15; 0,3; 0,5 mechanical 0,05 mm S3 - 30 % ED c/h 1200 EN 60034-1 load-dependent IP 65 2 switches (WE1 / WE2), potential-free, infinitely variable nominal load: 8 A / 250 VAC; 8 A / 30 VAC | |
| Linear motorized actuator incl. yoke, coupling and m yoke: thrust: actuator speed: protection class: ambient temperature: stroke: power supply optionally: power consumption: net weight: input signal ^{1,)} : output signal ^{1,)} : hysteresis ^{2,)} : resolution: operation mode: final position control: Accessories: Protecion class: | baelz 373-E62-150-30 with manual operation ounting screws optionally: S51 standard yoke or S52 large yoke 15000 N 30 mm/min. IP 54 -10°C + 50°C max. 80 mm 230 V, 115 V, 24 V, 50 / 60 Hz at 230 V = 63 VA at 115 V = 63 VA at 115 V = 63 VA at 24 V = 50 VA 11,5 kg 3-point; 0(2) 10 VDC; 0(4) 20mA 0 10 VDC 0,05; 0,15; 0,3; 0,5 mechanical 0,05 mm S3 - 30 % ED c/h 1200 EN 60034-1 load-dependent IP 65 2 switches (WE1 / WE2), potential-free, infinitely variable | |
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|---|------------------------------|-----------------|---------------|
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Technical Specifications and Operating Instructions TS + OI baelz 373-E62

1.2 Wiring diagram

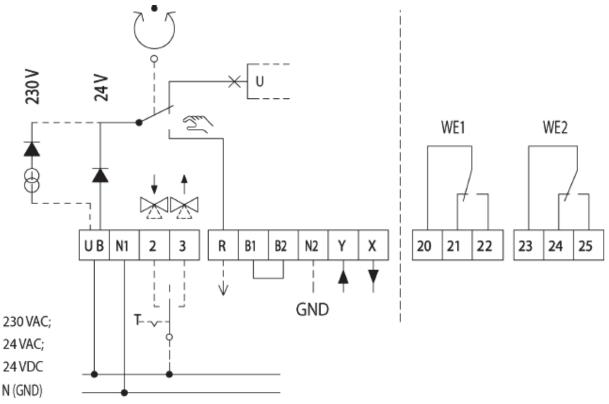


Fig. 4 Wiring diagram baelz 373-E62

R Feedback signal in operation mode "manual operation" R = 24 VAC max. 100 mA with actuators for 24 VAC R = 24 VDC max. 100 mA with actuators for 24 VDC R = 24 VDC max. 100 mA with actuators for 230 VAC N2 Zero potential of the signals "X", "Y" and "R".

If actuators for 230 VAC shall be operated in operation mode "continuous", i.e. via the analogue signal "Y", N2 (zero potential of the controller) has imperatively to be connected. With actuators for 230 VAC, in operation mode "3-point" N2 has only to be connected if "X" and / or "R" shall be used by the actuator. In case the zero potentials of the signals X, Y and R are identical to the zero potential of the power supply, you can bridge N1 and N2, in order to economize an additional feed line for N2.

B1 / B2 Possibility to connect a binary signal (e.g. anti-freeze protection)

For more details, see point 5.5

1.3 Designation

| Type designation: | baelz 373 - E62 - 100 - 60 - S51 | | | | |
|-------------------|----------------------------------|------|-------|------------------------|--------------|
| | I Motorized linear | | т | l hrust | I Type of |
| | actuator | I y | | Actuator yoke speed | |
| | | acti | uator | spe | ed |

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