



图片可能与实际产品不同



5-year warranty



技术参数

电气参数	额定电压	AC/DC 24 V
	额定电压频率	50/60 Hz
	额定电压范围	AC 19.2...28.8 V / DC 21.6...28.8 V
	运行功耗	2.5 W
	保持功耗	1 W
	变压器容量	5 VA
	辅助开关	1x SPDT, 1 mA...3 A (0.5 A 电感性), DC 5 V...AC 250 V, 0...95°, 可调
	辅助开关切换能力	1 mA...3 A (0.5 A 电感性), DC 5 V...AC 250 V
	电气连接	(2) 18 AWG 设备电缆, 1 m, 带 1/2" NPT 导管接头
	过载保护	电子旋转0至95°
	电气防护	执行器为双重绝缘
功能参数	运行扭矩	4 Nm
	运行方向	可用开关选择 0/1
	自复位运行方向	cw/ccw 安装可逆
	旋转角度	最大 95°
	电机运行时间	150 s / 90°
	电机运行时间	恒定、负载无关
	自复位运行时间	<25 s @ -20...50°C, <60 s @ -30°C
	噪音等级 (电机)	30 dB(A)
	噪音等级 (自复位)	62 dB(A)
安全参数	位置指示	机械式
	电源 UL 认证	Class 2 Supply
	NEMA/UL 防护等级	NEMA 2
	外壳	UL Enclosure Type 2
	认证	cULus acc. To UL 873 and CAN/CSA C22.2 No. 24-93
	质量标准	ISO 9001
	符合UL 2043标准	根据NEC第300.22(C)节和IMC第602节, 适用于空气增压室
	环境湿度	最大 95% 相对湿度, 无结露

技术参数

安全参数	环境温度	-30...50°C [-22...122°F]
	存储温度	-40...80°C [-40...176°F]
	维护	免维护
重量	重量	1.5 kg
材质	外壳材质	镀锌钢

产品特点

- 应用** For modulation or On/Off, fail-safe control of dampers in HVAC systems. Actuator sizing should be done in accordance with the damper manufacturer's specifications. The actuator is mounted directly to a damper shaft from 3/8" up to 1/2" in diameter by means of its universal clamp, 1/2" shaft centered at delivery. For shafts up to 3/4" use K6-1 accessory. A crank arm and several mounting brackets are available for applications where the actuator cannot be direct coupled to the damper shaft. Control is floating point from a triac or relay, or On/Off from an auxiliary contact from a fan motor contactor, controller or manual switch.
- 操作** The LF series actuators provide true spring return operation for reliable fail-safe application and positive close-off on air tight dampers. The spring return system provides consistent torque to the damper with, and without, power applied to the actuator. The LF series provides 95° of rotation and is provided with a graduated position indicator showing 0...95°. The LF24-3-S US uses a brushless DC motor which is controlled by an Application Specific Integrated Circuit (ASIC) and a microprocessor. The microprocessor provides the intelligence to the ASIC to provide a constant rotation rate. The ASIC monitors and controls the brushless DC motor's rotation and provides a digital rotation sensing function to prevent damage to the actuator in a stall condition. The actuator may be stalled anywhere in its normal rotation without the need of mechanical end switches. Power consumption is reduced in holding mode. The LF24-3-S US version is provided with one built-in auxiliary switch. This SPDT switch is provided for safety interfacing or signaling, for example, for fan start-up. The switching function is adjustable between 0° and 95°. The auxiliary switch in the LF24-3-S US is double insulated so an electrical ground is not necessary.
- 典型规格** Floating point, On/Off spring return damper actuators shall be direct coupled type which require no crank arm and linkage and be capable of direct mounting to a shaft up to a 3/4" diameter and centers on a 1/2" shaft (default). The actuators must be designed so that they may be used for either clockwise or counter clockwise fail-safe operation. Actuators shall have an external direction of rotation switch to reverse control logic. Actuators shall use a brushless DC motor and be protected from overload at all angles of rotation. If required, one SPDT auxiliary switch shall be provided having the capability of being adjustable. Actuators with auxiliary switch must be constructed to meet the requirements for Double Insulation so an electrical ground is not required to meet agency listings. Run time shall be constant and independent of torque. Actuators shall be cULus listed, have a 5 year warranty, and be manufactured under ISO 9001 International Quality Control Standards. Actuators shall be as manufactured by Belimo.

配件

电气配件	描述	型号
	辅助开关, 无汞	P370
	信号模拟器, 电源 AC 120 V	PS-100
	导管盒转换器	ZG-CBLS
	电气接线盒	
	变压器, AC 120 V to AC 24 V, 40 VA	ZG-X40
机械配件	描述	型号
	延长轴 170 mm ø10 mm 用于风阀轴 ø6...16 mm	AV6-20
	限位指示器	IND-LF

**配件**

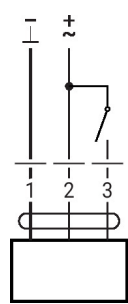
描述	型号
轴夹持器	K6 US
用于 LF..	
双面夹持器, 夹持范围 $\varnothing$ 16...20 mm	K6-1
球形接头 适用于 KH8/KH10 风阀曲柄臂	KG10A
球形接头 适用于 KH8 风阀曲柄臂	KG6
球形接头 适用于 KH8 风阀曲柄臂	KG8
风阀曲柄臂 插槽宽度 8.2 mm, 用于 $\varnothing$ 1.05"	KH12
风阀曲柄臂 插槽宽度 6.2 mm, 夹持范围 $\varnothing$ 10...18 mm	KH6
风阀曲柄臂 插槽宽度 8.2 mm, 夹持范围 $\varnothing$ 10...18 mm	KH8
曲柄臂, 夹持范围 $\varnothing$ 8...16 mm, 插槽宽度 8.2 mm	KH-LF
	KH-LFV
	LF-P
推杆 用于KG球形接头 L 36", 3/8" 直径	SH10
	SH8
键 8 mm 和 10 mm	TOOL-06
旋转角度限制器, 具有限位档	ZDB-LF
方轴适配器 8x8 mm	ZF8-LF
安装支架	ZG-109
连接套件	ZG-110
安装支架	ZG-112
用于 LF..	
	ZG-DC1
	ZG-DC2
	ZG-LF112
	ZG-LF2
	ZG-LMSA-1
	ZG-LMSA-1/2-5
室外防护罩 330x203x152 mm [13x8x6"] (LxWxH)	ZS-100
底板, 用于 ZS-100	ZS-101
室外防护罩 406x213x102 mm [16x8-3/8x4"] (LxWxH)	ZS-150
防爆外壳 406x254x164 mm [16x10x6.435"] (LxWxH), UL 和 CSA, I 类, 1&2区, B, C, D组, (NEMA 7), III 类, 危险 (分类) 场所	ZS-260
室外防护罩 438x222x140 mm [17-1/4x8-3/4x5-1/2"] (LxWxH), NEMA 4X, 带安装支架	ZS-300
室外防护罩 438x222x140 mm [17-1/4x8-3/4x5-1/2"] (LxWxH), NEMA 4X, 带安装支架	ZS-300-5
延长轴 1/2"	ZS-300-C1
延长轴 3/4"	ZS-300-C2
延长轴 1"	ZS-300-C3
连接套件	ZG-JSL

**电气安装**
**电缆颜色:**

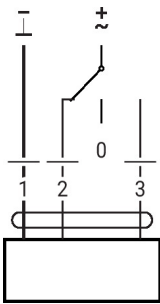
- 1 = 黑色
- 2 = 红色
- 3 = 白色
- S1 = 紫色
- S2 = 红色
- S3 = 白色

电气安装

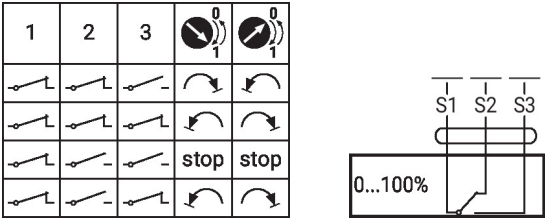
AC/DC 24 V, 开关型



AC/DC 24 V, 三态型



辅助开关



尺寸规格

PC

