

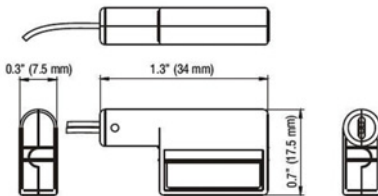
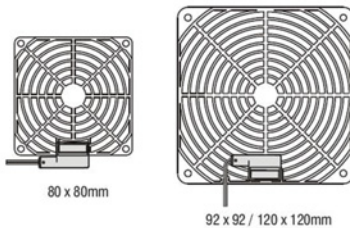
# REGULATING AND MONITORING

## LC 013 / LCF 013 Airflow Monitor

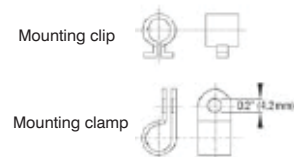
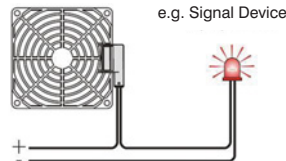


### Application:

The LC 013 is used as a signal contact to monitor fans or filter fans. It can be connected to monitoring systems or can directly switch alarm devices, such as LEDs or signal lamps. Loads with capacities exceeding the indicated switching capacity must be switched via a relay, e.g. electronic relay SM 010. The airflow monitor with NC contact closes upon loss of air movement, indicating fan failure (e.g. red signal lamp). The NO contact closes when fan is in operation and indicates fan is operating correctly.



Wiring example



- Magnetic reed switch contact**
- Wide range of application**
- Small size**
- Easy to install**

The airflow monitor is designed to indicate either the loss of air movement (NC) of any fan or that air flow is present (NO). The contact detects air movement regardless of direction of air. Its simple mechanical operation makes it a viable alternative to electronic monitoring systems.



### Technical Data

<b>Contact type</b>	reed / magnet contact
<b>Normally Closed (NC)</b>	switch contact open when air is flowing
<b>Normally Open (NO)</b>	switch contact closed when air is flowing
<b>Max. switching voltage</b>	NC: 240VDC (UL), 240V AC/DC (VDE) / NO: 60VDC
<b>Max. switching current</b>	NC: DC 500mA / NO: DC 170mA
<b>Max. switching capacity</b>	10W (resistive load)
<b>Switching threshold of airflow velocity</b>	> 8.2 ft/sec (2.5m/s) - hysteresis: approx. 3.3 ft/sec (1m/s)
<b>Max. airflow velocity</b>	165 ft/sec (50m/s)
<b>Contact resistance</b>	< 370mΩ (with wire)
<b>Max. air humidity</b>	70% RH (not condensing)
<b>Service life</b>	> 100,000 cycles
<b>Connection</b>	2 x single strand AWG 26, length 19.7" (500mm), tip of stranded wire stripped 5mm and tinned (NC: black, NO: blue)
<b>Housing</b>	plastic, UL 94HB, black
<b>Mounting</b>	mounting clamp or mounting clip, also available integrated in fingerguard (LCF 013) - see table
<b>Mounting position</b>	bidirectional tab perpendicular to airflow
<b>Operating temperature</b>	-4 to +122°F (-20 to +50°C)
<b>Storage temperature</b>	-4 to +176°F (-20 to +80°C)
<b>Protection type</b>	IP20
<b>Approvals</b>	UL File No. E250507, VDE

Note: The product of switching voltage and switching current must not exceed 10W. The max. voltage and max. current must not be exceeded, not even short-term (voltage/current peaks). The resulting voltage and current peaks of inductive or capacitive loads must be restricted by a contact protection circuit.

### Installation notes:

- The airflow monitor must not be installed in the impact range of permanent magnets or ferrous metals in order to avoid possible interference problems.
  - A suitable distance from electromagnetic fields, e.g. generated by transformers, motors, etc., must be maintained in order to avoid possible interference problems. Interferences must be checked with an oscillograph and the mounting position of the airflow monitor should be adjusted if necessary.
  - Avoid installing the airflow monitors in areas where air pockets or turbulence can be expected.
  - Ambient air with a high dust content should be avoided.
- As there are many different conditions of use, suitability of this product must be assessed by the end user in its final application.

Description	Part No. (NC)	Part No. (NO)	Dimensions	Weight (approx.)
LC 013 Airflow Monitor with mounting clamp and mounting clip	01300.0-00	01300.1-00	1.3 x 0.7 x 0.3" (34 x 17.5 x 7.5mm)	0.2 oz. (5g)
	01301.0-00	01301.1-00	3.15 x 3.46 x 0.4" (80 x 88 x 10.5mm)	0.7 oz. (20g)
LCF 013 Airflow Monitor integrated in plastic fingerguard	01302.0-00	01302.1-00	3.6 x 3.6 x 0.4" (92 x 92 x 10mm)	0.7 oz. (20g)
	01303.0-00	01303.1-00	4.7 x 4.7 x 0.4" (120 x 120 x 10mm)	1.1 oz. (30g)

Data subject to change without notice.