



### **Application**

- Refrigeration and air conditioning systems
- ✓ Stop or start of fans in air-cooled condensers
- ✓ With control circuit of DC motors or large AC motors
- Connect directly to a single-phase AC motor (Max. 2kw)
- ✓ Non-corrosive media like oil, water and air

#### Special Features

- Snap-action SPDT contacts
- ✓ Compact design
- ✓ Fully welded bellows

- **✓** Promised switch accuracy ≤ 2%
- ✓ Adjustable on site

#### Description

Do you need to protect your refrigeration system from excessively low suction pressure or excessively high discharge pressure with economic prices? Switch-Mate 221 is the answer. They are reliable to start or stop your refrigeration compressors or fans on air-cooled systems. They are easy to set up followed with the instruction manual. InstruMate model 221 offers various application possibilities with non-corrosive media like oil, water and air.

# Default Specification

Ambient Temperature	Media Temperature Inside the Pressure Switch
-40+65 °C	-25+65 °C
Rated Impulse Voltage	Short Circuit Protection Fuse
4kV	16A
Insulation	Connection
400V	Free cutting steel, Nickel plated

## Reference Conditions

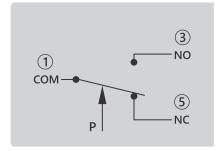
Relative Humidity per BS 6134	Non-Repeatability of the Switch Point
< 50 % r. h. at 40 °C [104 °F] < 90 % r. h. at 20 °C [68 °F]	≤ 2 % of span

# Electrical Rating

Rated Voltage	125 V AC	250 V AC	24 V DC
Non-inductive current	20A	10A	10A
Inductive full load	15A	8A	8A
Inductive Instrument current	72A	72A	64A

# Switch Contact

#### SPDT<sup>1</sup> (change over)



(5) NC: Normally Closed

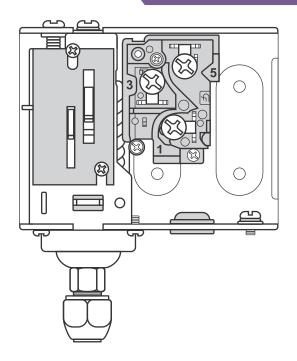
① COM: Common Contact

3 NO: Normally Open

P: Pressure

1. Single pole double throw

# Terminal Assignments



NC: Normally Closed
COM: Common Contact
NO: Normally Open

## Pressure Ranges

Setting Range (bar)	Adjustable differential (bar)	Permissible switch point on rising pressure (bar)
-0.2 7.5	0.7 4	0.5 7.5
1 10	0.7 4	1.7 10
2 14	1 4	3 14
5 32	2 6	7 32
01	0.2 0.5	-0.21

<sup>\*</sup> Above pressure ranges are dual scale in bar and psi.

# **Available Connections**

Thread Type & Size	Code
G ¼ female	F4
G ¼ B	G4
1/4 flare	U4

# Options

✓ Mpa pressure scale

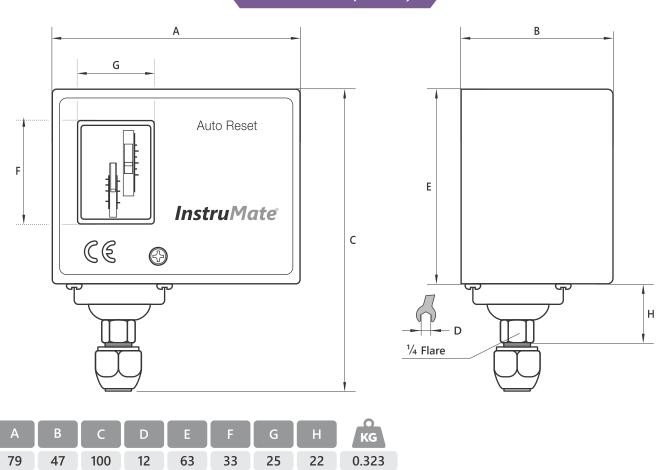
<sup>✓</sup> Pressure connections per customer request

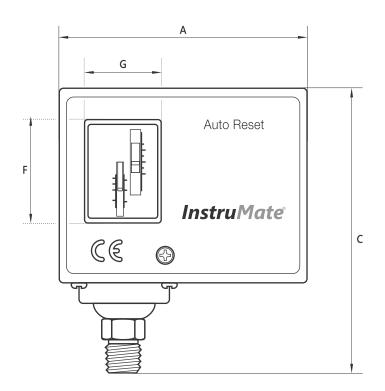
## Accessories

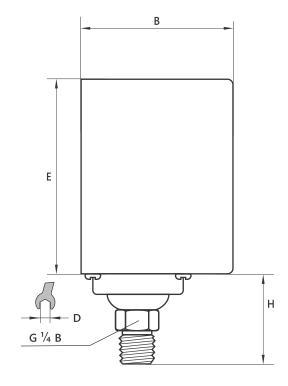


Included in the delivery

# Dimensions (in mm)







A	В	С	D	E	F	G	Н	KG
79	47	96	14	63	33	25	20	0.316

# How To Order

	Product Group Name	Model	Connection	Pressure Range	Options
Example:	Switch-Mate	221	U4	-0.2 7.5 bar	_

Or simply order by item number on the basis of your previous purchases.

