

Product Application Reference

Differential Pressure Controller

EDPS2018 Differential Pressure Controller



Summary

These controls are designed to sense pressure differences between two points and may be used as operating or limit controls. Typical applications are to detect flow across a chiller or water-cooled condenser, to detect flow in a heating system and sensing lube oil pressure differential on refrigeration compressors.

Description

EDPS2018 Differential Pressure Controller incorporates two opposing pressure elements and an adjustable range set point spring with a calibrated scale. The control switches at the indicated set point on an increase in differential pressure and switches back to the normal position when the different pressure decreases to the set point less the mechanical switching differential.

Specifications

Scale range	8 to 60 PSI (55 to 414 KPa)
Operating diff. Pressure overrun*	2 PSI (14 KPa), Fixed
Max. low pressure bellows	180 PSI (1241KPa)
Max. difference in Between bellows	120 PSI (830 KPa)
Operating voltage	1A, 24V AC 50/60Hz
Contact unit	SPDT total enclosed non-snap acting (floating) Penn switch
Material	Box: 0.062" (1.6mm) cold-rolled steel.
	Shell: 0.025" (0.6mm) cold-rolled steel.
Finish	Gray baked
Mounting bracket.	Mounted on flat surface or with a 271-51
Wiring	Color coded screw type terminal.
Operating temperature	Minimum -1°C
	Maximum 60°C
IP Protection	30
Shipping weight	1100g

Mounting

Mount the controller in any position on a flat surface or panel board. Use two screws or bolts trough the holes in the back of the case, or use a 271-51 bracket. The controller should be mounted to reduce the possibility of accumulating foreign matter inside the bellows.

Adjustment

The set point can be adjusted by the notched cam located in the top of the control. The switching differential can be adjusted by turning a hexagonal nut on the differential adjusting screw, located inside the control cover. (adjustable differential models only).

Linking chart

Re: when the pressure differential reducing, float pole will connect commonality point (R) and terminal blue (B); when the pressure differential increasing, the float pole will connect commonality point (R) and terminal yellow (Y).