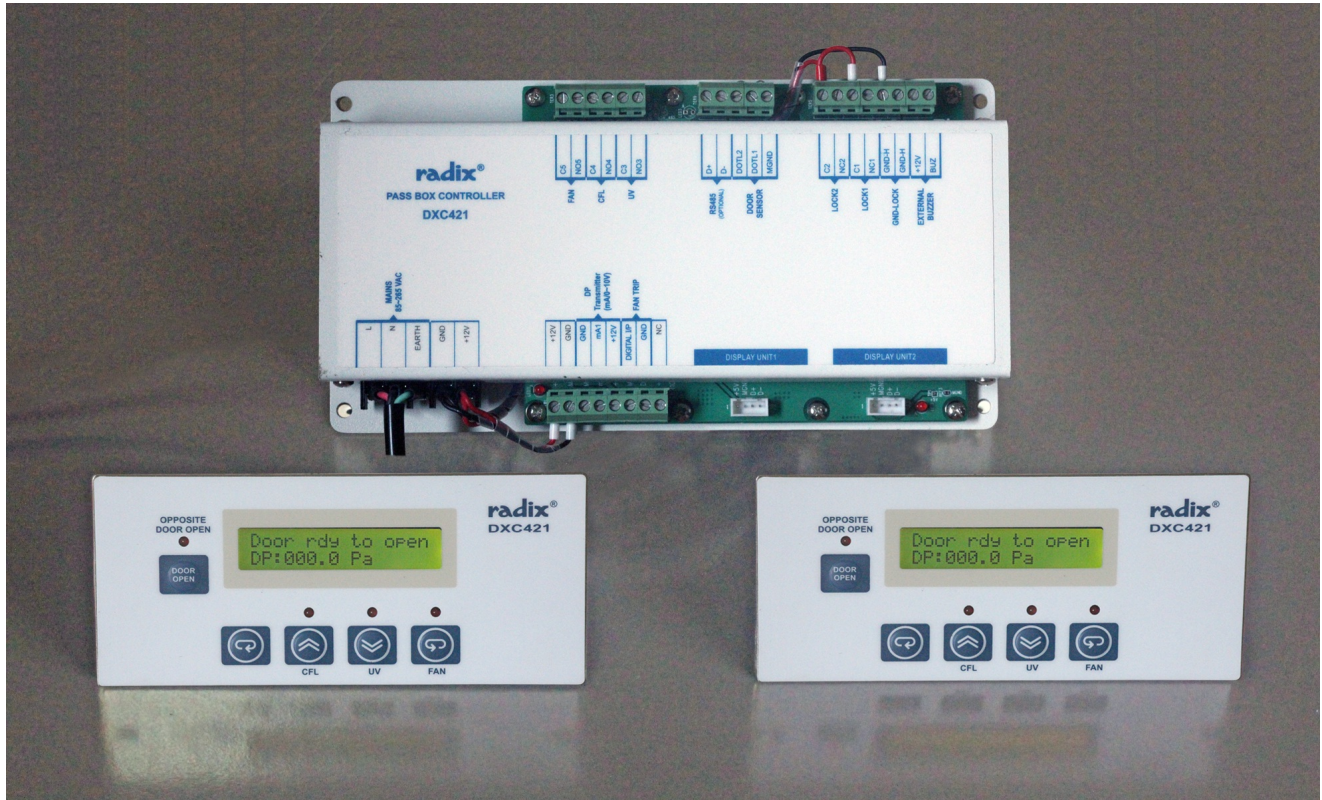


PASS BOX CONTROLLERS

2-Door, 3-Door



ABOUT DXC421

Pass Box is used for material transfer from one clean room to another clean room. It consists of a rectangular box with two/three doors. All doors are interlocked such that more than one door cannot be opened at the same time, to prevent pressure losses and cross contamination.

Radix Pass Box Controller DXC421 achieves this by ensuring that before Door 1 of a Pass Box is opened, Door 2 and Door 3 are closed.

There are two/three LCD Display Cum Operator Panels (LCD Display Panels), one each to be mounted above each door. The panel has 2x16 backlit LCD to display door status, UV life span, CFL, FAN, UV status, etc.

DXC421 also has provision to connect UV lamp, CF lamp and FAN.

FEATURES

- Advanced 32-bit microcontroller
- Status of all doors are shown in the LCD Display Panel
- Door interlock logic/control with audio-visual annunciation
- Auto/Manual mode for outputs
- CF LAMP ON when any door is open
- UV Lamp logic/control with lamp life monitoring function
- LED indication for CFL, UV & FAN on LCD display panel
- Provision of FAN trip with LED indication
- Buzzer alarm for High DP & Low DP

PASS BOX CONTROLLERS

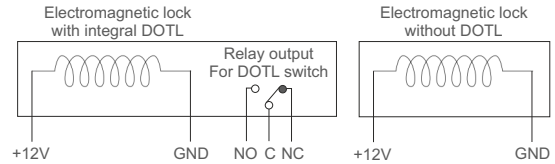
2-Door, 3-Door

ACCESSORIES

ELECTROMAGNETIC DOOR LOCKS

A magnetic lock is a simple locking device that consists of an electromagnet and armature plate. By attaching the electromagnet to the door frame and the armature plate to the door, a current passing through the electromagnet attracts the armature plate holding the door shut. LED indications are used to show the door and lock status.

- Holding force : Holding force 300LBS/136Kg
- Dimensions : 170x23x32 mm
- Armature plate : 152(L)x10(W)x32(H) mm
- Voltage : 12VDC
- Current : 314 mA
- Operating temperature : -10 ~ 55 °C



LCD DISPLAY PANEL

LCD display panel consists of a Door Open Switch, LCD display and 4 special multi functions keys. LED indication shows Door status (ON=Open, OFF=Closed). LCD display is used to show parameters in run time.

- LCD : 2x16 Backlit LCD
- Door Open LED indication : Provided
- Enclosure MOC : SS316L
- Mounting : Flush panel



PASS BOX CONTROLLERS

2-Door, 3-Door

SPECIFICATIONS

All specifications at ambient of 25 °C, 24VDC unless specified otherwise

SUPPLY VOLTAGE	
External : Supply voltage to SMPS : 88 ~ 264VAC	
SMPS output voltage (for door locks, etc) : 12V/2.1A	
INPUT	
Door interface	Door open switch (Tactile switch) on each LCD display
	4 special function keys for parameter settings and
	manual operation of CFL, FAN, UV
OUTPUT	
Relay output	2/3 Relay outputs for magnetic locks
	1 Relay output for UV light
	1 Relay output for CFL
	1 Relay output for FAN
Door control indicator	LCD display on each door
	Buzzer
ENVIRONMENTAL	
Operating temperature	0 to 55 °C
RELAYS FOR LOCKS	
Contact rating	3A / 120VAC
Maximum switching voltage	240VAC/30VDC
Maximum switching current	3A

PASS BOX CONTROLLERS

2-Door, 3-Door

SPECIFICATIONS

All specifications at ambient of 25 °C, 24VDC unless specified otherwise

RELAY FOR UV AND CFL	
Maximum switching voltage	277 VAC
Maximum switching current	10A
Contact rating	5A / 277VAC
RELAY FOR FAN	
Maximum switching voltage	277 VAC
Maximum switching current	12A
Contact ratings	12A/250 VAC
ENCLOSURE	
Pass box controller	229 x 120 x 34 mm See Fig 1
Enclosure type	Powder coated sheet metal MS
Mounting	Wall
COMMUNICATION *	
Serial port	RS485
Protocol	MODBUS RTU
Slave ID	User programmable (1-247)
Baud rate	9600
DIFFERENTIAL PRESSURE INDICATION *	
Input	2-wire, 4 to 20 mA from external DP transmitter
Transmitter excitation supply	As per transmitter model
Indication	On LCD Display Panel

PASS BOX CONTROLLERS

2-Door, 3-Door

DIMENSIONS mm

Fig 1 : 2 DOOR SYSTEMS

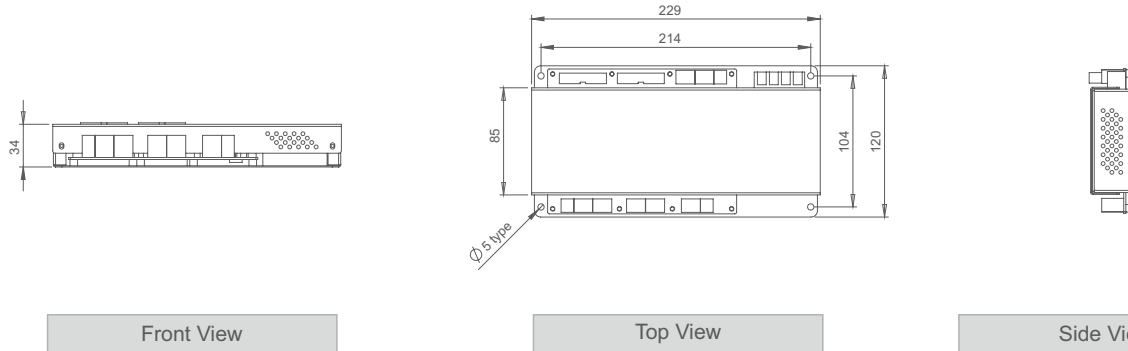


Fig 2 : 3 DOOR SYSTEMS

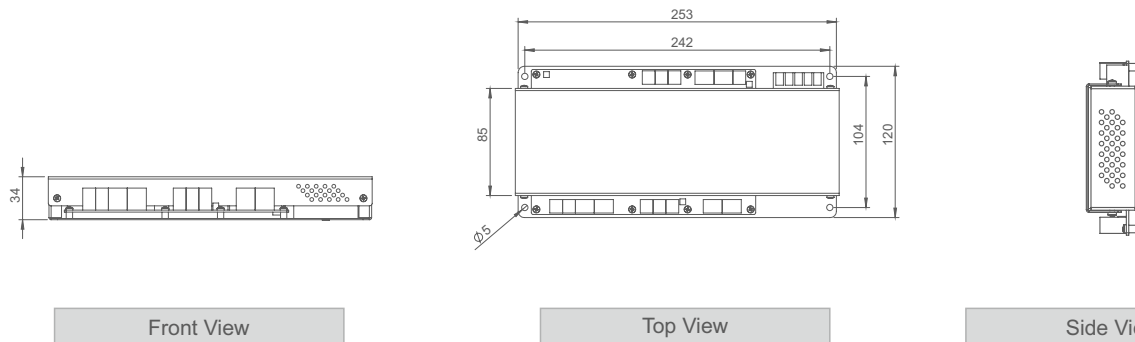
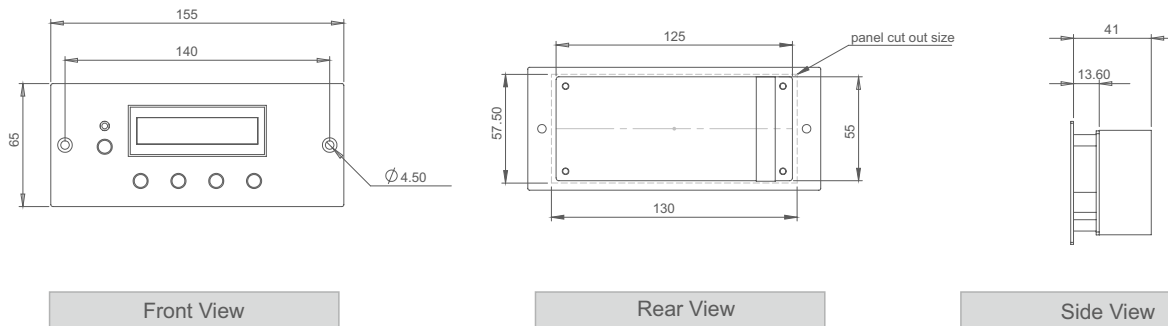


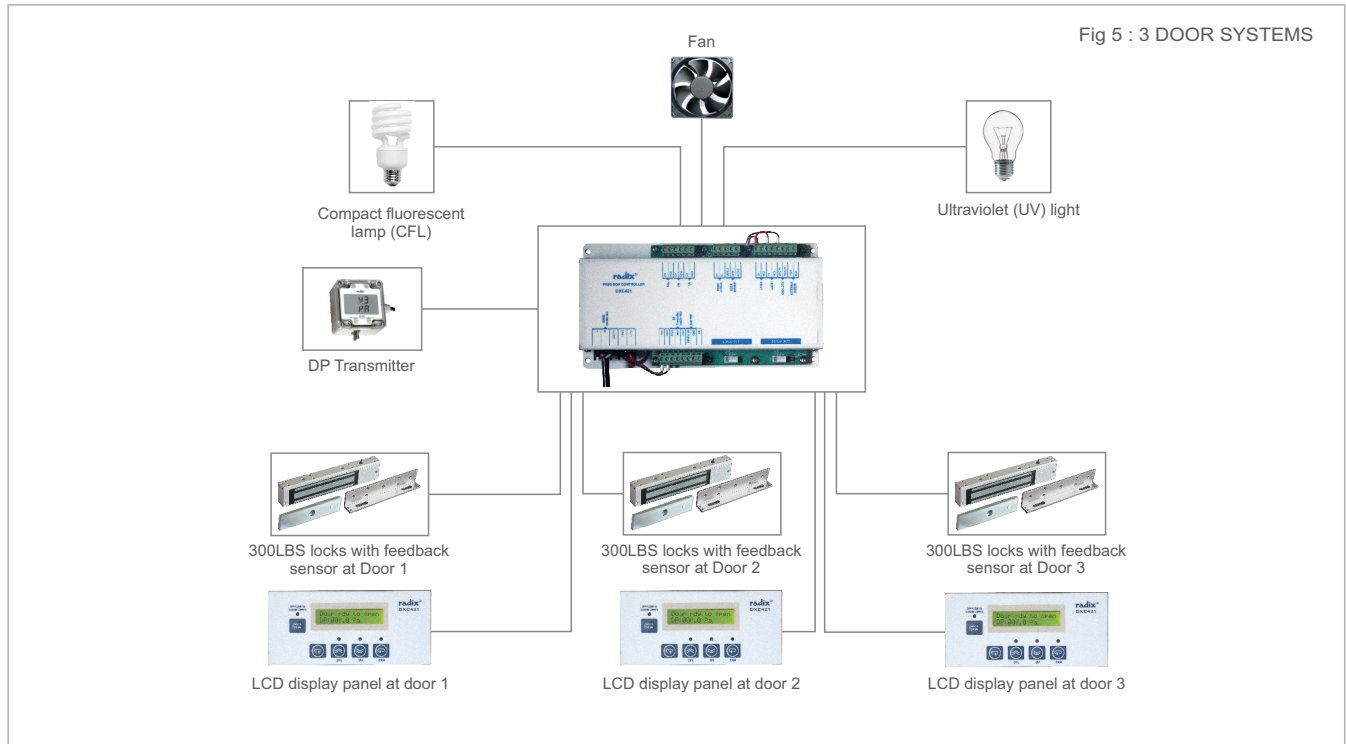
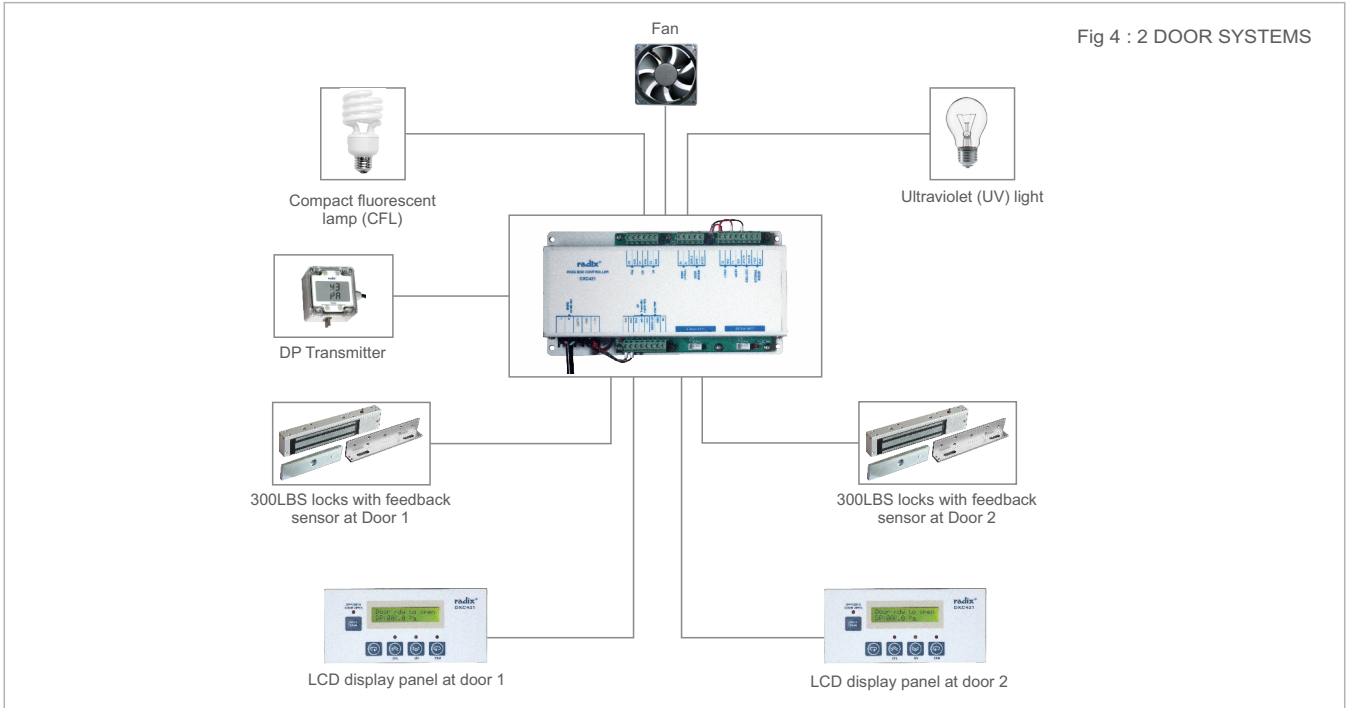
Fig 3 : DISPLAY MOUNT PLATE



PASS BOX CONTROLLERS

2-Door, 3-Door

APPLICATIONS



PASS BOX CONTROLLERS

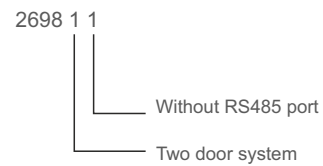
2-Door, 3-Door

ORDERING INFORMATION

PASS BOX CONTROLLER (Electronic Control Unit for Pass Box with LCD Display Panels)

Example	2698	1	1	
Product Code	2698			
No. of doors		1		Two door system
		2		Three door system
RS485/Modbus RTU			1	Without RS485 port
			2	With RS485 port

Example



Note : Included are the Electronic Control Unit, the LCD Display Panels and the Connecting Cables

PARTS & ACCESSORIES

ITEM	ORDER CODE
Electronic Control Unit for Pass Box - 2-door	2939
Electronic Control Unit for Pass Box - 3-door	2940
Electromagnetic Door Lock with inbuilt DOTL, 300 lbs	2700
LCD Display Panel	2699
Connecting Cable (Control Unit to LCD Display Panel)	2701

CAT#744R1/A

ENQUIRIES

Instruments: sales@radix.co.in
Sensors: sensors@radix.co.in
Gauges: gauges@radix.co.in
Automation: automation@radix.co.in
Level: level@radix.co.in

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