PARKING VENTILATION CONTROLLER
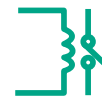
VLC201

Upto 8 CO Transmitters as Input

9 Potential Free Digital Inputs

Upto 24 Relays

RS485 / MODBUS RTU

Fire Alarm & Alarm ACK

PC Based Utility for Configuration

radix ®

PARKING VENTILATION CONTROLLER VLC201

8 CO CHANNELS
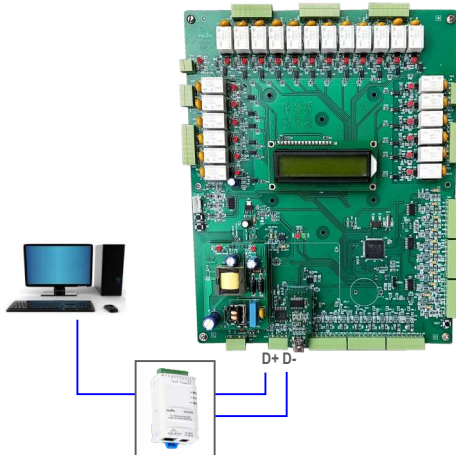

CO Transmitter

24 EXHAUST / JETVENT / FRESH AIR FANS
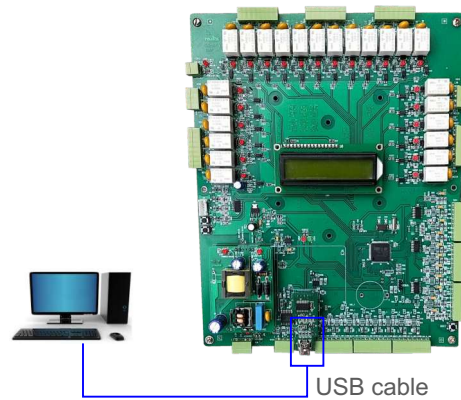

RS485 FOR UTILITY

D+ D-

Ethernet to RS485 Converter (DCC603)

USB PORT FOR UTILITY

USB cable

* Note : PC based USB configuration
only for on table (without load)

FIRE ALARM INPUT

Smoke
detector

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PARKING VENTILATION CONTROLLER
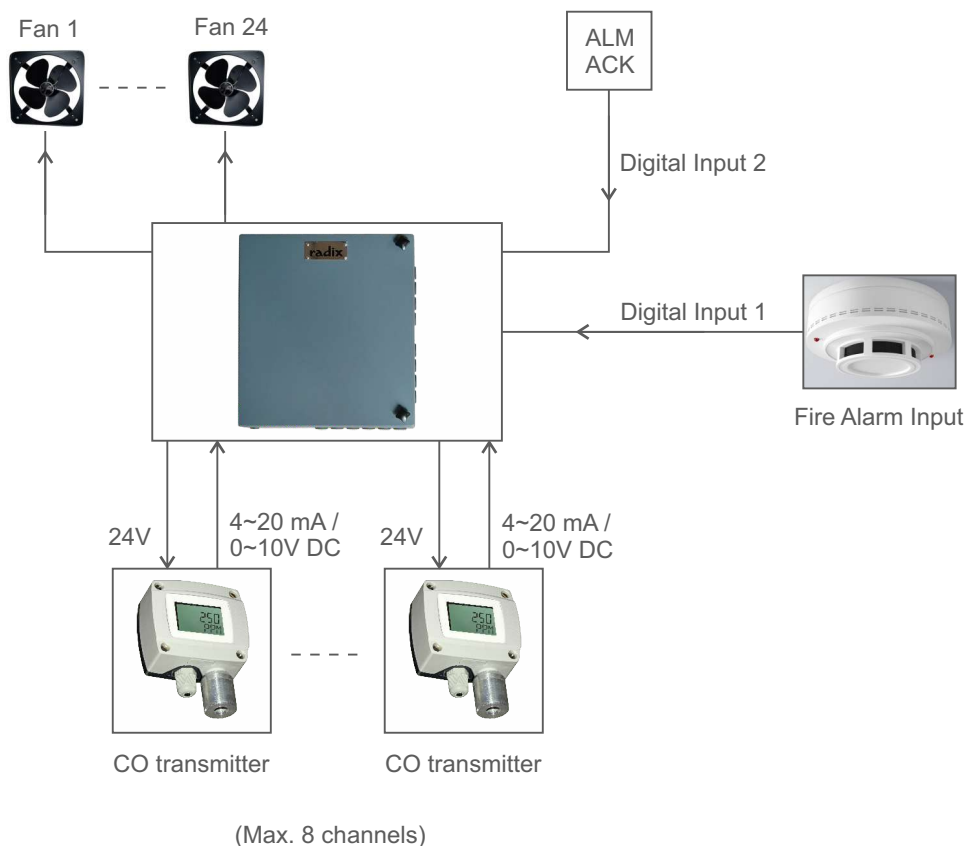
VLC201

ABOUT VLC201

Radix Parking Ventilation Controller VLC201 is designed to efficiently manage the car park ventilation system. It helps to maintain good air quality when the car park traffic is high and conserve energy when it is low.

VLC201 works in conjunction with the JetVent fans, exhaust fans, fresh air fans, CO and pollutant sensors and the BMS.. VLC201 is developed to increase the energy efficiency of a car park, while ensuring the ventilation output is optimized. It will vary the speed of the car park fans according to the changing requirements and demand in the environment.

When the CO pollutant levels within the car park reach a pre-set level, the ventilation fans begin to ramp up in speed. As the levels increase and decrease during the course of the day and night, the speed of the fans and therefore the ventilation rate also increases and decreases.

Grouping of inputs is used for zone-wise configuration, with separate channels, set points and relays for easy configuration.
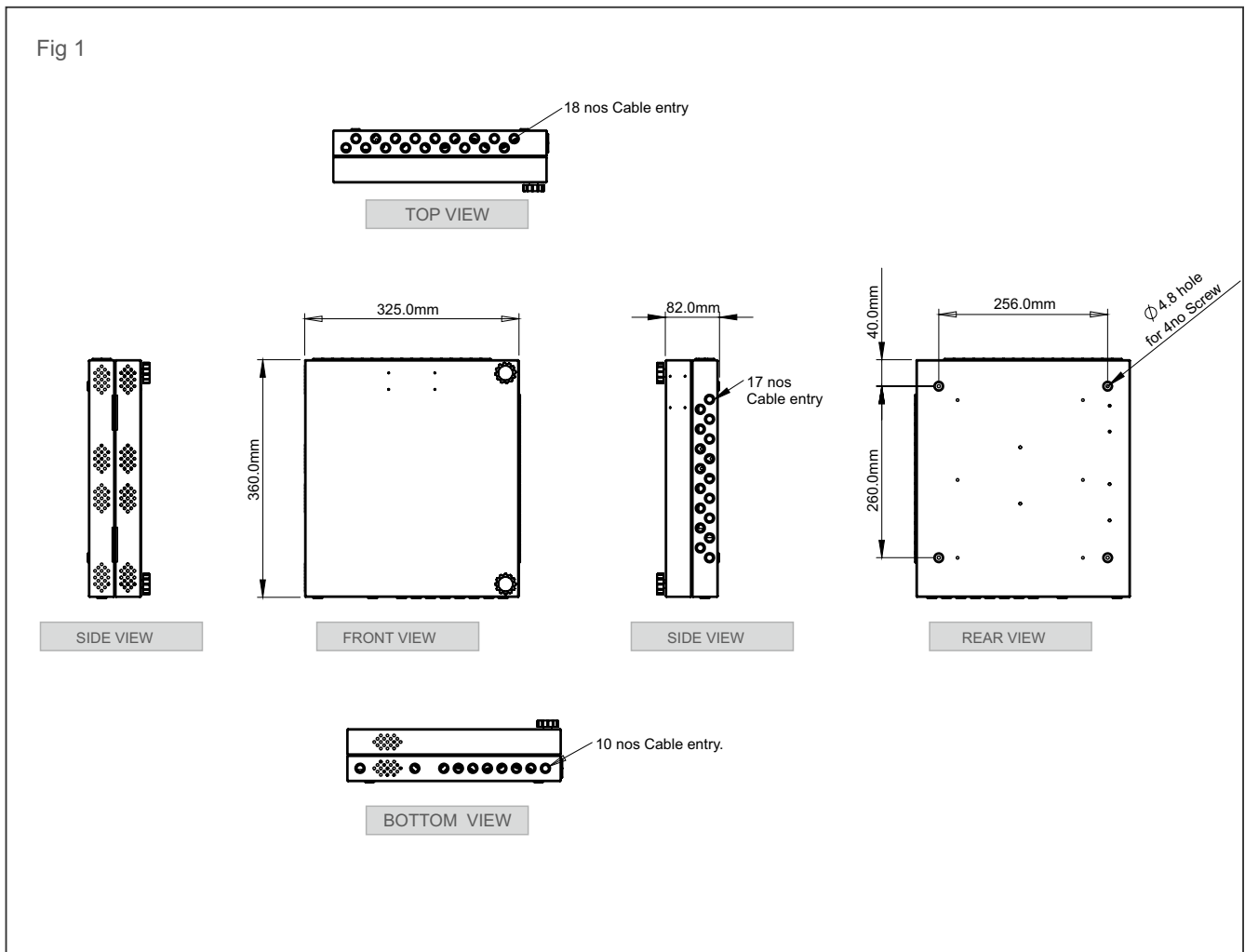
APPLICATIONS

Fan 1   Fan 24

ALM ACK

Digital Input 2

Digital Input 1

Fire Alarm Input

24V   4~20 mA / 0~10V DC   24V   4~20 mA / 0~10V DC

CO transmitter   CO transmitter

(Max. 8 channels)

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PARKING VENTILATION CONTROLLER

VLC201

SPECIFICATIONS

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

INPUTS	
Analog inputs	
CO transmitter	4~20 mA and 0~10V DC
	In-built 24V DC supply for CO transmitter
No. of CO inputs	Upto 8 CO transmitter (2 / 4 / 6 / 8)
Digital inputs	
Type of inputs	Potential free contacts
No. of inputs	Upto 9
Fire alarm	One fire alarm input
Alarm Acknowledge	One alarm ACK

RELAYS	
No. of relays	Upto 24 relays (8 / 16 / 24)
Type of relay output	Potential free relay contacts (NO-C)
Relay contact rating	5A/250 V AC

ZONE WISE GROUPING
Upto 8 groups
Upto 8 CO channels selectable in any group (total of CO channels of all groups is 8)
Single or dual setpoints in each group
Note : Relays selected in one group are not selectable in other groups   Same relays can be selected in same group

COMMUNICATION
Isolated RS485 / MODBUS RTU for continuos monitoring (UTILITY/SCADA)
USB port for PC based utility for on table parameter configuration

ENVIRONMENTAL CONDITIONS	
Operating temperature	-20 to 55°C
Storage temperature	-20 to 55°C
Relative humidity	5 to 95% (non-condensing)

OTHER	
Supply voltage	85 to 265 VAC, 50 Hz
Dimensions (in mm)	360(H) x 325(W) x 82(D)

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PARKING VENTILATION CONTROLLER

VLC201

DIMENSIONS mm

Fig 1

18 nos Cable entry

TOP VIEW

325.0mm

360.0mm

82.0mm

17 nos Cable entry

40.0mm

256.0mm

⌀ 4.8 hole for 4no Screw

260.0mm

SIDE VIEW

FRONT VIEW

SIDE VIEW

REAR VIEW

10 nos Cable entry.

BOTTOM VIEW

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PARKING VENTILATION CONTROLLER

VLC201

FEATURES SUMMARY

- Zone wise grouping by parameter configuration
- 2 / 4 / 6 / 8 CO transmitters as inputs
- 8 / 16 / 24 relay outputs for Exhaust Fans and Fresh Air Fans
- 9 potential free digital inputs
- One fire alarm input for emergency purpose
- One alarm ack input
- Dual speed option for VFD operated fans with prefixed speeds
- Programmable output relay assignment through PC utility
- Easy to configure all parameters using PC based utility
- RS485 / MODBUS RTU for BMS integration
- Power supply : 85~265V AC
- In-built 24V DC supply for CO transmitters

ORDERING INFORMATION

CODE	SPECIFICATIONS	1	2	3	4
2993					
1	**CO Input Type**				
	4~20 mA	420			
	0~10 V DC	010			
2	**No. of CO Inputs**				
	2		2		
	4		4		
	6		6		
	8		8		
3	**No. of Relays**				
	8			08	
	16			16	
	24			24	
4	**Communication**				
	RS485 / MODBUS RTU				485
	None				NON

CODE - 1 - 2 - 3 - 4

Order Code Format : XXXX-XXX-X-XX-XXX

Example

VLC201, 4~20 mA Input, 2 Inputs, 24 Relays, RS485 / MODBUS RTU
2993-420-2-24-485

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