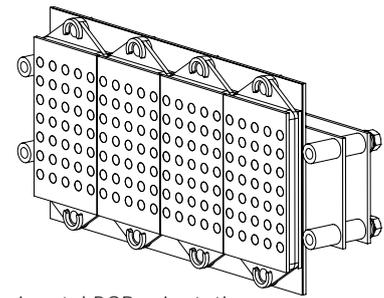


## Digital Display Type VRS54H

Publication Number PB161/0517

**Description**  
VRS54HS/P

7 rows x 20 columns, Ø4.0mm dots, 50mm high. Horizontal PCB orientation.



**Application**

The VRS54H is a highly vandal resistant display unit, providing clear character illumination and identification for all lift applications. The indicator units come in a choice of four colours: red, green, blue or amber.

The digital display together with its encoders are designed to be compatible with all makes of lift equipment.

**Note:**

This component can be used to meet M2/S2 Building Regulations when a car position indicator, type ULS54HS/P, is required.

**Operation**

**The displays** require 12V to 24V a.c./d.c. power supply. The maximum current consumption is less than 0.56A. Connector SER is for the power supply inputs.

The displays are made up of four high resolution block matrix LED displays which provide a clear, bright, wide angle view, even in sunlight.

Each unit is programmed to meet your specific requirement, just advise us of the legends you wish to be displayed.

When the lift is operating normally, the left-hand side of the display will show the directional arrow followed by a floor legend.

For parallel displays, the trigger signals to display the floor legend and arrows from the lift controller are accepted by the controller board causing the legends to be displayed together with the directional arrow. EEPROMS are programmed into each display unit to customise the unit before installing it into the lift.

For serial displays, the trigger signals to display the floor number and arrows from the lift controller are accepted by the encoder board in the lift machine room and transmitted to all the display units through the 4 wire serial interface. For the technical detail of the input signals please refer to the encoder board CX-Basic & CX-Synchro documentation.

Floor Position Indicator Control - floor inputs are driven by binary code, gray code, any arbitrary code or one per floor inputs.

Directional Arrow and Gong Control - (the gong is supplied as an option and applies to serial units only) - an input each for UP and DOWN arrow together with optional flash and scroll features if required. When these signals are present the directional arrow will flash and/or scroll. In addition, a lift stop signal is required to stop the arrow from scrolling when the car stops at a floor. If the floor number setting on the Switch SW1 matches the floor position code, the stationary arrow will flash to simulate a lantern, the gong outputs will activate gong.

**Display Capabilities**

The table overleaf details the maximum number of characters that can be programmed and triggered into the display.

## Construction

The front appearance of the VRS54H is designed to match the stainless steel faceplate. The LED display blocks for the VRS54H have a 1.5mm stainless steel grade 316 front face. The block body, which is permanently bonded to the stainless steel face, is 5mm in depth and manufactured from polycarbonate. The design is such, that the effective source of light is the face of the block itself, giving an angle of view in excess of 150°.

The impact resistance of the display exceeds 10 joules (EN81-71 Class 2).

The display blocks and associated electronic driver board are mounted behind the faceplate by means of weldstuds. All electronic boards are tropicalised.

The VRS54H is a compact display that can be fitted in landing and car stations.

The unit can be supplied fitted into faceplates of stainless steel grade 316, and is available finished both horizontally (standard) or vertically.

FEATURES AVAILABLE <b>SERIAL DISPLAYS</b>	TERMINAL ALLOCATION (used with Serial displays only)	
	CX-Basic 24 MAX*	CX-Basic+Synchro 40 MAX**
UP & DN Arrows	2	
Scrolling Arrows	1	
Flashing Arrows	1	
Floors: Encoded	1-3	2
	1-7	3
	1-15	4
	1-31	5
One per floor: (discrete)		
With CX-Basic only	1-14	1 each
With CX-Basi+Synchro	1-30	
Message triggers:	1 each	

\* CX-Basic available inputs are reduced by 10 (dedicated inputs) for lantern, arrow, gong and speech control.

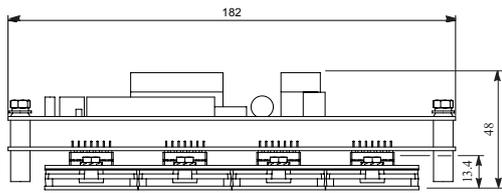
\*\* CX-Basic+Synchro available inputs are reduced by 10 (dedicated inputs) for lantern, arrow, gong and speech control.

FEATURES AVAILABLE <b>PARALLEL DISPLAYS</b>	TERMINAL ALLOCATION (10 AVAILABLE)	
UP & DN Arrows	2	
Scrolling Arrows	1	
Flashing Arrows	1	
Floors: Encoded	1-3	2
	1-7	3
	1-15	4
	1-31	5
One per floor 1-10	1 each	
Message triggers:	1 each	

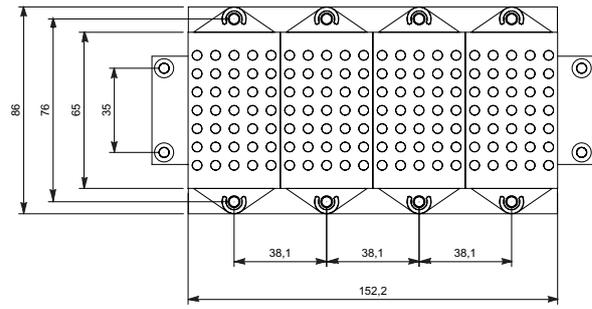
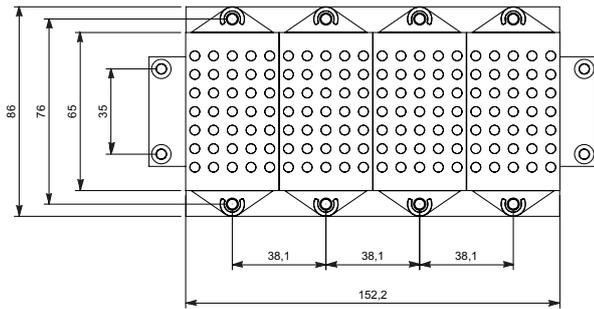
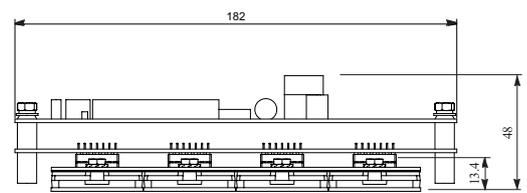
## Specification

	<b>VRS54HP</b>	<b>VRS54HS</b>
Input Signal	10 programmable phot-coupled inputs	Four wires serial communication
Display screen size	152.2mm (w) x 65mm (H)	152.2mm (W) x 65mm (H)
Physical PCB size	182mm (W) x 45mm (H) x 48mm D	182mm (W) x 45mm (H) x 48mm (D)
Number of LED dots	7 rows by 20 columns	7 rows by 20 columns
Dot size	4.0mm diameter	4.0mm diameter
Dot pitch	7.62mm	7.62mm
Character height	50mm	50mm
Colour	Single (red, green, blue or amber)	Single (red, green, blue or amber)
Operating temperature	-20°C to +65°C	-20°C to +65°C
Storage temperature	-20°C to +75°C	-20°C to +75°C
Humidity	0% to 95% non-condensing	0% to 95% non-condensing
Power supply, absolute max rating	10Vd.c to 30Vd.c. or 10Va.c. to 27Va.c.	10Vd.c. to 30Vd.c. or 10Va.c. to 27V a.c.
Peak supply current (d.c.)	0.56A @ 12V, 0.23A @ 24V	0.56A @ 12V, 0.25A @ 24V
	The floor codes and floor legends are stored in the displays EEPROM. Configuration and customisation is carried out by programming and replacing an EEPROM in the display unit.	Serial data is transmitted in blocks to the display unit. Each logical block defines a floor number and direction arrow. The floor codes and floor legends are stored in the encoder cards EPROM.

## VRS54HP (Parallel) Digital Display



## VRS54HS (Serial) Digital Display



**BLOCKS AVAILABLE FINISHED HORIZONTALLY (STANDARD) OR VERTICALLY**

### VRS54 HORIZONTAL CUTOUT DIMENSIONS

