

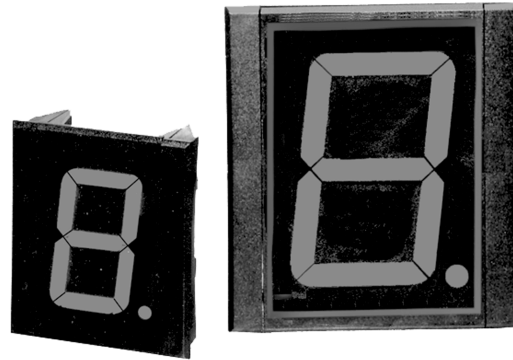
Data Sheet

7-Segment-LED-Large-Display-Module

Data Sheet

60/100 mm 7-Segment Large Display

- ◆ Single modules
- ◆ red
- ◆ SPS-compatible



The panel mounting large 7-segment LED display modules allows user configuration of display requirements.

The modules are available with appropriate end brackets and fixing enabling easy assembly into panel. Two digit sizes are available **60 mm and 100 mm** and the LED colour is red.

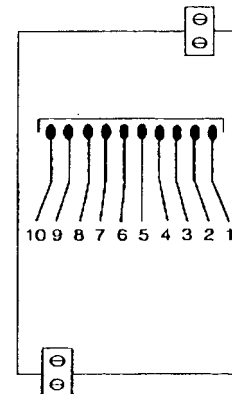
The electronic interface is BCD via connector on the rear of the module. The modules are PLC compatible.

Pin layout

Pin	Signal	Description
1	GND	0V
2	DP	Decimal point
3	Data 2 ⁰	Data
4	Data 2 ³	Data
5	LE	Latch enable
6	BI (inverted)	Blank inhibit
7	LT (inverted)	Segment test
8	Data 2 ²	Data
9	Data 2 ¹	Data
10	Vcc	24 V

Feature

- ◆ LED 7-Segment Display
- ◆ Display size 60 and 100 mm
- ◆ Reading distance up to 40 m
- ◆ Display colour red with redfilter
- ◆ Viewing angle $\pm 75^\circ$
- ◆ Assembled in black plastic bezel
- ◆ Left and right end brackets included
- ◆ SPS-compatible
- ◆ Data entry with BCD Code
- ◆ Parallel- and Multiplex operation possible
- ◆ Control inputs for display test and blank inhibit



EMCV Guiding rules

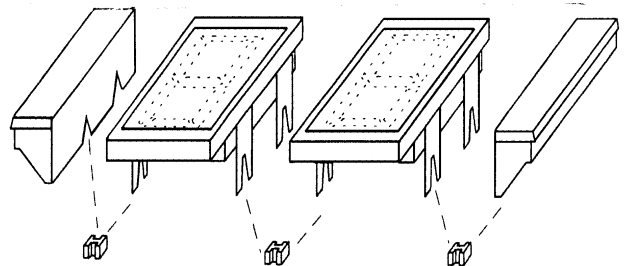
Emmision

EN 50081-2, July 1993
EN 55011; group ½; cl. A, March 1991
Limiting value identical to EN 55022

Immision

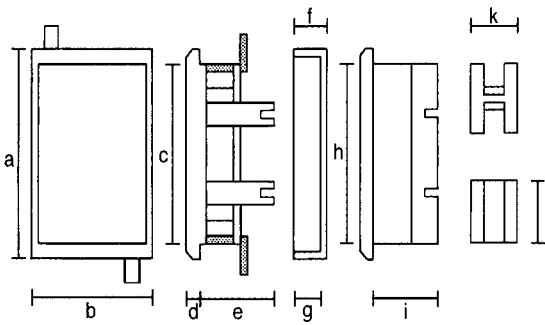
EN 50082-2, March 1995
Basenorm like guideline 89/336/EWG (resp. EMVG)

Assembly



Display modules with left and right end brackets and clips.

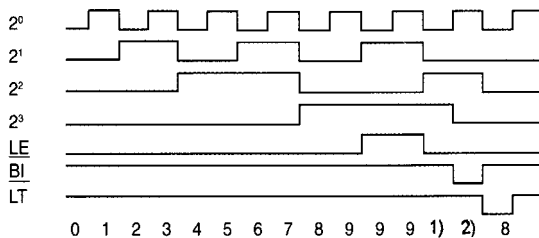
Dimensions



Measurement	Height 60 mm	Height 100 mm
a	96	144
b	57	94
c	91	137
d	4	5
e	27	30
f	12	15
g	10	12
h	91	136
i	31	31
k	8	8
l	11	11

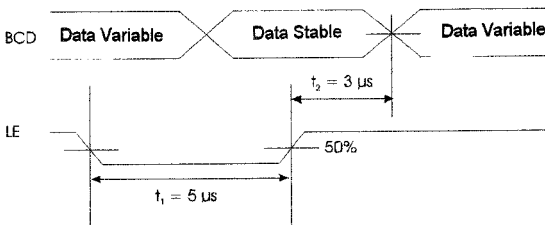
All dimensions in mm

Signalshapes



- 1) No display (blank), overflow > 9
- 2) No display (blank), BI (inverted) active

Pulse diagram multiplex operation



Truth table

Input							Output
LE	BI (inverted)	LT (inverted)	2 ³	2 ²	2 ¹	2 ⁰	Display
X	X	0	X	X	X	X	8
X	0	1	X	X	X	X	blank
0	1	1	0	0	0	0	0
0	1	1	0	0	0	1	1
0	1	1	0	0	1	0	2
0	1	1	0	0	1	1	3
0	1	1	0	1	0	0	4
0	1	1	0	1	0	1	5
0	1	1	0	1	1	0	6
0	1	1	0	1	1	1	7
0	1	1	1	0	0	0	8
0	1	1	1	0	0	1	9
0	1	1	1	0	1	0	blank
0	1	1	1	0	1	1	blank
0	1	1	1	1	0	0	blank
0	1	1	1	1	0	1	blank
0	1	1	1	1	1	0	blank
0	1	1	1	1	1	1	blank
1	1	1	X	X	X	X	*

* The data are displayed with the positive edge of the Signal LE.

Electrical Data

Display height		60 mm 100 mm
Reading distance	60 mm 100 mm	25 m 40 m
Viewing angle		±75°
Supply voltage	V _{CC}	21 - 30 VDC
Colour		red
Signal level	U _{High} U _{Low}	11...30 V 0...4 V
Input resistance	R _i	10 KΩ
Cutoff frequency (Multiplex operation)	f _g	5 kHz
Segment current	I _{segm.}	20 mA
Temperature range	T _v	0...+ 50° C

Order information

Display module 60 mm	A10-057-21M
Supplied with: 1 pair of end brackets 4 pieces clips 1 Instruction leaflet	included
Display module 100 mm	B10-057-21M
Supplied with: 1 pair of end brackets 4 pieces clips 1 Instruction leaflet	included