



Outdoor or indoor large displays

DN1, DN2, DN3

Display	numerical
Digit height	100/200/300 mm
Number of rows	1 or 2
Characters per row	3,4 or 5
Display colour	red, yellow or green
Displayed values	value measured by external device, transmitted through RS-485 interface
Interface (Master)	RS-485 for value download
Protection rating	IP54 (IP65 option)
Additional functions	<ul style="list-style-type: none"> • good visibility in range up to 120 m • brightness sensor installed (display brightness changes depending on outside conditions)

Indoor large displays

	DL11, DL12, DL13	DL21	DNL
Display	numerical		
Digit height	100 mm		230 mm (DNL2), 305 mm (DNL3)
Number of rows	1, 2 or 3	1	1 or 2
Characters per row	3	3	4
Display colour	red, yellow or green	red/orange/green (programmable)	red, yellow
Displayed values	value measured by external device, transmitted through RS-485 interface		value measured by external device, transmitted through RS-485 interface
Interface (Master)	Modbus RTU RS-485 for value transmission		
Interface (Slave)	RS-485 for configuration		RS-485 for configuration
Programming	using dedicated software	using LCon software	
Additional functions	<ul style="list-style-type: none"> • unit field can be printed in each row • 15 V d.c. supply for P18 transducer 	<ul style="list-style-type: none"> • 3-colour, display colour changes on value change. Ranges of colour changes can be programmed 	<ul style="list-style-type: none"> • visibility up to 120 m • brightness sensor (digital brightness changes depending on outside conditions) • analog input 4...20 mA

DL12 APPLICATION EXAMPLES



OUTDOOR DISPLAY

TABLE 96. DN1, DN2, DN3 ORDERING CODE:

DN -	X	X	X	X	X	XX	XX	X	XX	X
Digit height:										
100 mm	1									
200 mm	2									
300 mm	3									
Kind of display:										
Code acc to the table 10 (version 8 concerns DN3)	X									
on order*	9									
Digit colour of the first display field:										
red	R									
yellow	Y									
green	G									
blue** (concerns version 1...4 and 6 acc. to the tab.11)	B									
Digit colour of the second display field:										
lack of second field	0									
red	R									
yellow	Y									
green	G									
Way of fixing:										
on the wall	1									
suspended	2									
on order*	9									
Unit of the first display field:										
code number of the unit acc. to the table 11	XX									
on order*	99									
Unit of the second display field:										
code number of the unit acc. to the table 11	XX									
on order*	99									
Quantity displayed and measuring device:										
acc. to the table 12	X									
on order*	9									
Version:										
standard	00									
custom-made*	XX									
Acceptance tests:										
without extra quality requirements	8									
with an extra quality inspection certificate	7									
acc. to customer's request*	X									

TABLE 10.

Code	Kind of display	Number of digits	Display overall dimensions [mm]			Assembly dimensions [mm]		
			DN1	DN2	DN3	DN1	DN2	DN3
1		2 digits	a = 415 b = 77 h = 160	a = 560 b = 77 h = 264	a = 820 b = 100 h = 370	c = 220 d = 50 L = 250	c = 320 d = 75 L = 350	c = 450 d = 80 L = 450
2		3 digits	a = 415 b = 77 h = 160	a = 560 b = 77 h = 264	a = 820 b = 100 h = 370	c = 220 d = 50 L = 250	c = 320 d = 75 L = 350	c = 450 d = 80 L = 450
3		4 digits	a = 593 b = 77 h = 160	a = 810 b = 77 h = 264	a = 1200 b = 100 h = 370	c = 320 d = 50 L = 420	c = 430 d = 75 L = 480	c = 850 d = 80 L = 710
4		5 digits	a = 593 b = 77 h = 160	a = 810 b = 77 h = 264	a = 1200 b = 100 h = 370	c = 320 d = 50 L = 420	c = 430 d = 75 L = 480	c = 850 d = 80 L = 710
5		2x 2 digits	a = 593 b = 77 h = 160	a = 810 b = 77 h = 264	a = 1200 b = 100 h = 370	c = 320 d = 50 L = 420	c = 430 d = 75 L = 480	c = 850 d = 80 L = 710
6		clock	a = 415 b = 77 h = 160	a = 810 b = 77 h = 264	a = 1200 b = 100 h = 370	c = 320 d = 50 L = 420	c = 430 d = 75 L = 480	c = 850 d = 80 L = 710
7		2x 3 digits 2 rows	a = 415 b = 77 h = 270	a = 560 b = 77 h = 478	a = 820 b = 100 h = 680	c = 320 d = 50 L = 250	c = 320 d = 75 L = 350	c = 450 d = 80 L = 450
8*		clock + temperature					A = 1200 B = 100 H = 370	C = 850 D = 80 L = 450

Caution:
Alternate display every 10 sec.
Clock synchronized by DCF signal.

* concerns DN3

* after agreeing with the manufacturer
** concerns DN1

TABLE 11. CODES OF HIGHLIGHTED UNIT:

Code	Unit	Code	Unit	Code	Unit
00	without unit	22	°F	44	m ³ /h
01	mV	23	K	45	obr
02	V	24	% H ₂ O	46	obr/min
03	kV	25	mbar	47	rad
04	mA	26	Bar	48	szł.
05	A	27	mmH ₂ O	49	szł./h
06	kA	28	mmHg	50	O ₂
07	kW	29	Pa	51	CO
08	MW	30	hPa	52	CO ₂
09	var	31	kPa	53	l
10	kvar	32	MPa	54	l/min
11	Mvar	33	pH	55	l/h
12	kWh	34	s	56	mg
13	Ω	35	min	57	kg
14	kΩ	36	h	58	Mg
15	μ S	37	mm	59	k/h
16	mS	38	cm	60	Mg/h
17	Hz	39	m	61	N
18	kHz	40	m ³	62	kN
19	MHz	41	m/s	63	mg/l
20	%	42	m/h		
21	°C	43	km/h		

TABLE 12. CODE OF BACKLIGHTED UNIT AND MEASURING DEVICES

Displayed quantities	Code
Without measuring quantity	0
Temperature measurement * Measuring range	1
Humidity measurement * Measuring range	2
Temperature and humidity measurement * Measuring range	3
Pressure measurement * Measuring range	4
Measurement of the real time * Measuring range	5
Measurement of pulses, revolutions, working time * Measuring range	6
Measurement of power network parameters * Measuring range	7
measurement of current and voltage standard signals * Measuring range	8

INDOOR DISPLAYS

DL11 ORDERING CODE:				
DL11 -	X	XX	X	
Colour of display field:				
red	R			
yellow	Y			
green	G			
Version:				
standard		00		
custom-made*		XX		
Acceptance tests:				
without extra requirements				8
with an extra quality inspection certificate				7
acc. to customer's request*				X

DL12 ORDERING CODE:				
DL12 -	X	X	XX	X
Colour of first display field:				
red	R			
yellow	Y			
green	G			
Colour of second display field:				
red	R			
yellow	Y			
green	G			
Version:				
standard			00	
custom-made*			XX	
Acceptance tests:				
without extra requirements				8
with an extra quality inspection certificate				7
acc. to customer's request*				X

DL13 ORDERING CODE:					
DL13 -	X	X	X	XX	X
Colour of first display field:					
red	R				
yellow	Y				
green	G				
Colour of second display field:					
red	R				
yellow	Y				
green	G				
Colour of third display field:					
red			R		
yellow			Y		
green			G		
Version:					
standard				00	
custom-made*				XX	
Acceptance tests:					
without extra requirements					8
with an extra quality inspection certificate					7
acc. to customer's request*					X

DL21 ORDERING CODE:		
DL21 -	XX	X
Version:		
standard	00	
custom-made*	XX	
Acceptance tests:		
without extra requirements		8
with an extra quality inspection certificate		7
acc. to customer's request*		X

DNL ORDERING CODE:								
DNL -	X	X	XX	X	XX	XX	X	X
Digit height:								
230 mm (9")	2							
305 mm (12")	3							
Colour of digits in first row:								
red	R							
yellow	Y							
Unit of the first row:								
lack			00					
acc. to the table 13			XX					
Colour of digits in the second row:								
lack of row			0					
red			R					
yellow			Y					
Unit of the second row:								
lack				00				
acc. to the table 13				XX				
Version:								
standard					00			
first row with input 4...20 mA and output +15V					01			
custom-made*					XX			
Language:								
Polish								P
English								E
other*								X
Acceptance tests:								
without extra requirements								0
with an extra quality inspection certificate								1
acc. to customer's requirements								X

TABLE 13. CODES OF HIGHLIGHTED UNIT:	
Code	Unit
00	lack
01	%
02	°C
03	szt.
04	imp.
05	kg
06	m/s
07	szt./h
08	m ³
09	obr
XX	on order

* after agreeing with the manufacturer