

## Data Sheet

# PLUS+1<sup>®</sup> Mobile Machine Displays

## DP210 Series



Danfoss DP210 Series Displays are elements of the PLUS+1<sup>®</sup> family of mobile machine management products.

The DP210 Series provide high quality, cost effective performance solutions to fit the needs of today's mobile machines.

The DP210 Series features a USB mini-B connection at the front of the display. This port allows full access to all devices on the machine CAN network via the PLUS+1<sup>®</sup> GUIDE Service Tool.

Large function-programmable buttons provide tactile feedback. The high resolution display is viewable in a wide range of lighting conditions. Backlight and contrast settings are adjustable.

The DP210 Series feature robust mechanical, electrical and ingress protection specifications that meet the demands of mobile machine operation.



### Features

#### Model dependent

- 3.8" high resolution grayscale LCD display
- 4 programmable soft keys
- 2 red, 2 green, 2 amber software controlled LEDs
- 2 CAN 2.0B ports
- 1 fixed-range analog input
- 2 digital/analog/frequency/current/rheostat inputs
- 1 (0.5A) digital output
- Real time clock
- USB 2.0 port with mini-B connector
- PLUS+1<sup>®</sup> GUIDE programmable
- J1939 engine monitor software package (requires application key)
- Data logging capability
- Rugged IP 54 rated housing
- Integrated DEUTSCH connector

- Extended temperature performance range
- CE and E marked
- Mounting hardware and panel seal gasket included

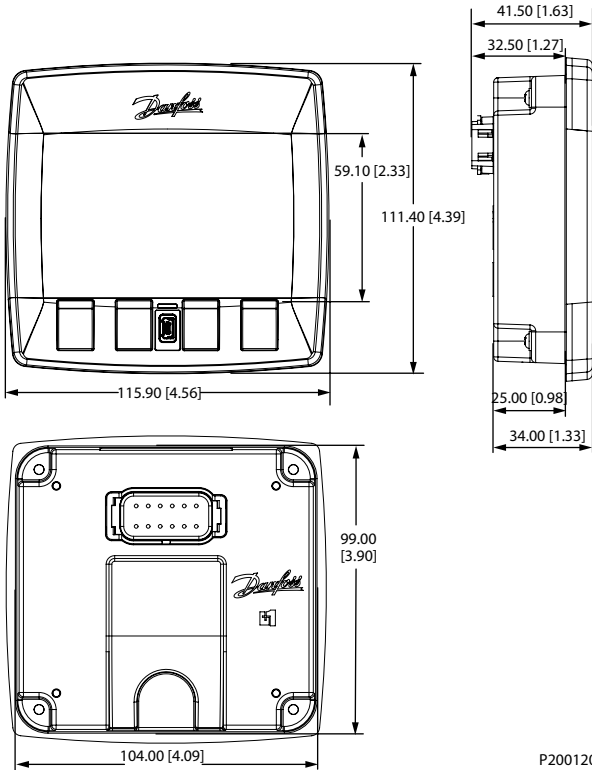
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[Comprehensive technical literature online at powersolutions.danfoss.com](http://powersolutions.danfoss.com)

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**Dimensions**

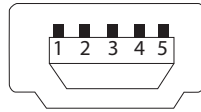
mm [in]



P200120

This display series is recommended for in-cab installation only.

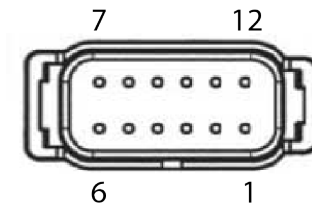
**Pin assignments**



P200 129

*USB mini-B pin connector*

<b>1</b>	VBUS
<b>2</b>	D-
<b>3</b>	D+
<b>4</b>	NC
<b>5</b>	GND



kwa1449086169773

Use care when wiring mating connector. Diagram shows device pins.

*DEUTSCH 12-pin connector*

<b>1</b>	Power ground-
<b>2</b>	Power supply+
<b>3</b>	CAN 0 High
<b>4</b>	CAN 0 Low
<b>5</b>	AIN/CAN Shield
<b>6</b>	N/A
<b>7</b>	N/A
<b>8</b>	CAN 1 High
<b>9</b>	CAN 1 Low
<b>10</b>	DIN/AIN/FREQ IN/CURRENT IN, RHEOSTAT
<b>11</b>	DIN/AIN/FREQ IN/CURRENT IN, RHEOSTAT
<b>12</b>	DOUT (0.5A)

**Model features**

A	B	C	D	E	F	Part number
DP210	04	01	02	04	01	10106884
	04	01	03	04	01	10107383

**Specifications**

<b>Processor</b>	ARM 7 core, 16/32 bit, 72 MHz
<b>RAM</b>	64 KB on-chip, 1 MB on board
<b>FRAM</b>	8 KB
<b>Supply voltage</b>	9 to 63 V dc/6.5 Watts
<b>Connector</b>	DEUTSCH DTM-12
<b>Type</b>	LCD with 32 grayscale levels
<b>Resolution</b>	240 × 160 pixels
<b>Viewable area</b>	80 mm × 55 mm [3.15 x 2.16]
<b>IP Rating</b>	IP 54*
<b>Operation temperature</b>	-40° C to +70° C [-40° F to +158° F]
<b>Storage temperature</b>	-40° C to +85° C [-40° F to +176° F]
<b>Weight</b>	250 g [0.5 lb]
<b>Vibration/shock</b>	5 g / 1000 g
<b>EMC/ESD</b>	100 V/m / 15 kV
<b>Digital output (0.5A)</b>	1

\* USB in front display carries a full IP54 rating only if the USB mating connector or seal plug cover is in place.

## Mobile Machine Displays DP210

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*A: Model name*

<b>DP210</b>	PLUS+1 <sup>®</sup> Mobile Machine Displays
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*B: Input/output options*

<b>04</b>	2 CAN ports, 2 multifunction
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*C: Real time clock*

<b>01</b>	RTC and LTF
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*D: Flash memory/application key*

<b>02</b>	2 MB without Application Key
<b>03</b>	2 MB with Application Key

*E: Application log (vault memory)*

<b>04</b>	2 MB
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*F: USB port type*

<b>01</b>	USB device
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Related product	Part number
DEUTSCH Mating Connector Bag Assembly (16-20 AWG)	10102025
DEUTSCH Mating Connector Bag Assembly (20-34 AWG)	10100944
DP210 Mounting Hardware Kit	10107264
PLUS+1 <sup>®</sup> GUIDE Single User License	10101000
DP210 Panel Seal Replacement Gasket	10105916

ENGINEERING  
TOMORROW



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