

Nokeval



FD100 series

User Manual

Contents

Document information	2
FD100A4 and FD100A6 field displays	3
Power supply connection	4
Configuring	5
Specifications	7

Document information

Device Scope:	FD100A4 (4-digit device) FD100A6 (6-digit device)
Case versions:	1.0 to 1.0
Document Type:	manual
Document ID:	3103
Document Version:	6
Document Date:	22.12.2011

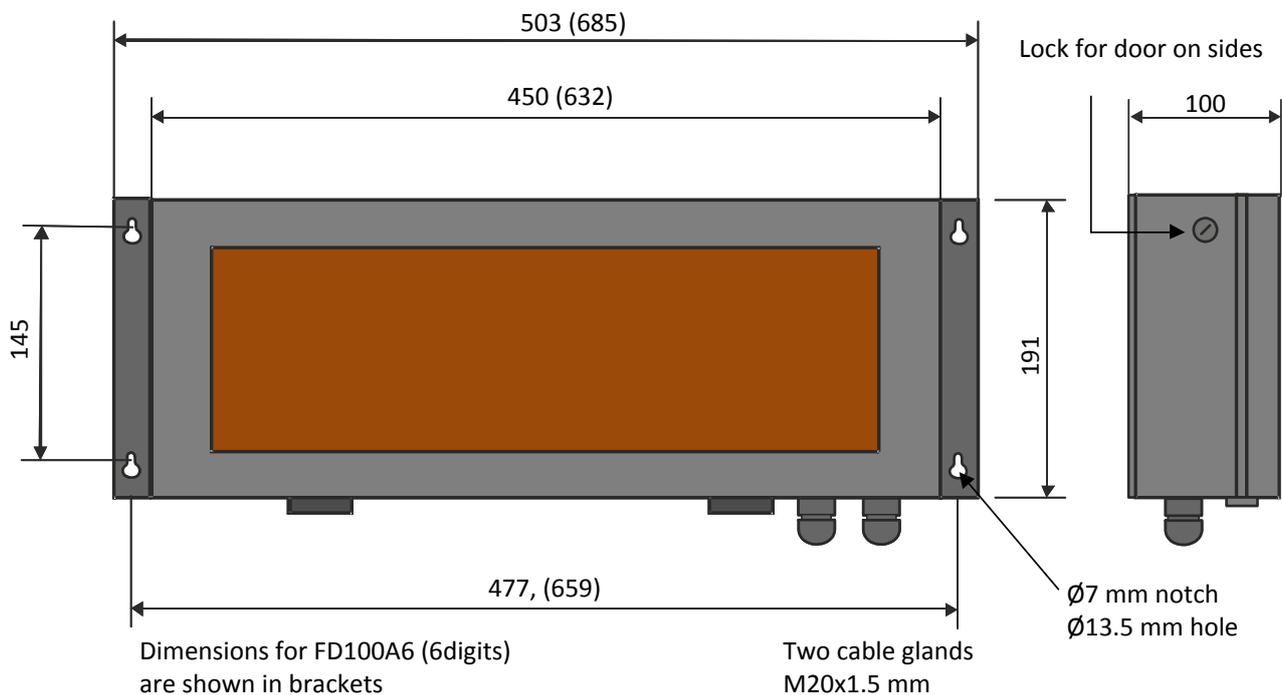
FD100A4 and FD100A6 field displays

Introduction

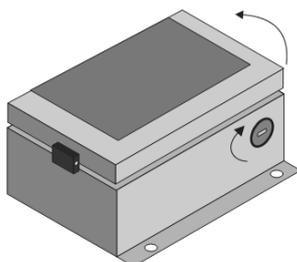
The FD100 series includes 4 and 6 digit models. Digit size is 100mm. The displays are based on input cards of the panel meter series 2000 giving over 100 combinations. The unit has wide power supply range of 41...265 VAC or 20...28 VAC/VDC depending on model.

This manual covers enclosure information and installation of the unit. Input cards and programming are covered in corresponding 2000-series panel meter manual. All 2000-series panel meter combinations are valid for this series.

Mounting



The display unit can be mounted with four screws, one at each corner. The diameter of the screw must be between 5.5 and 6.5 mm. The unit may be mounted to a steel or aluminum structure, to wood with minimum thickness of 20 mm, or to a material of equivalent or better strength.



To open the case door

There are quick locks on the both sides of the case. The door can be unlocked by turning side locks towards the rear of the case.

Warning! Only a qualified electrician is allowed to open the enclosure.

Symbols and markings



Protective earth connector

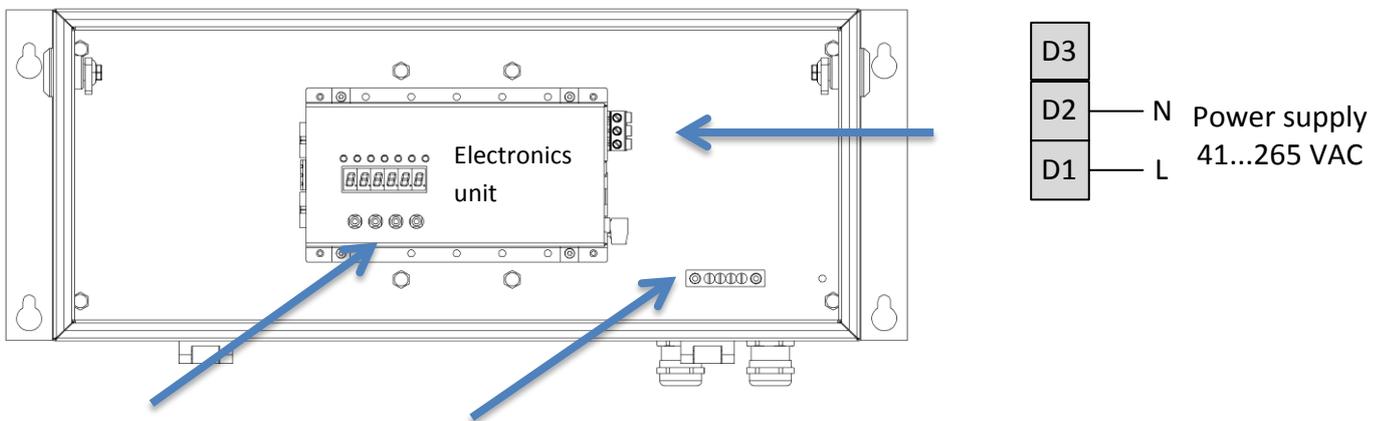


Alternating or direct current

Power supply connection

The unit has wide power supply range of 41...265 VAC or 20...28 VAC/VDC depending on model. There are two types of power supply connectors; grey connector color is used to indicate higher voltages and green color to indicate 24 V.

FD100A4-F48/230 and FD100A6-F48/230

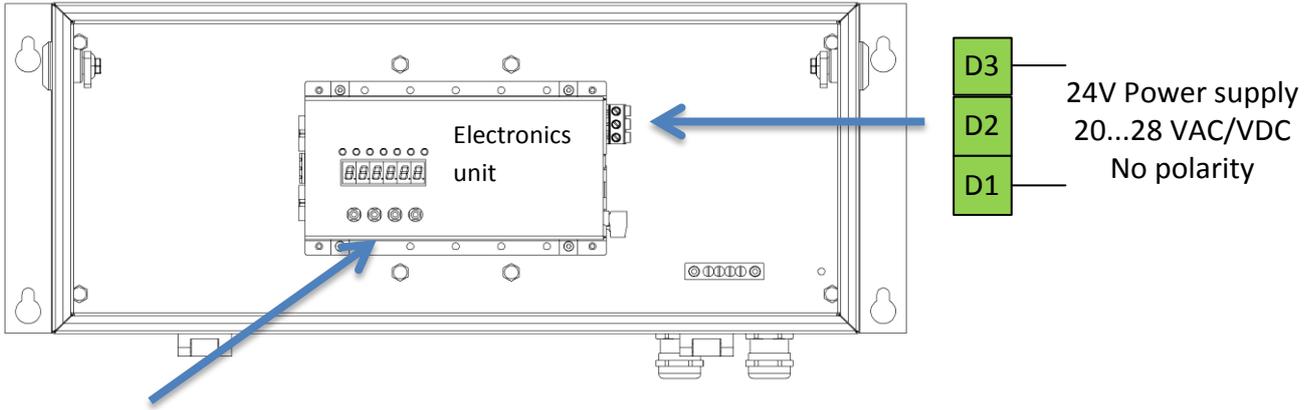


Small display and buttons
for configuration

PE - Protective earth.
Free wire length must be
longer than on N and L
lines

Do not strip the wires more than necessary in order to avoid exposing dangerous voltages. Tie the N and L wires so that if one of them gets accidentally disconnected, the wire end can't reach the other connectors.

FD100A4-F24 and FD100A6-F24



Small display and buttons for configuration

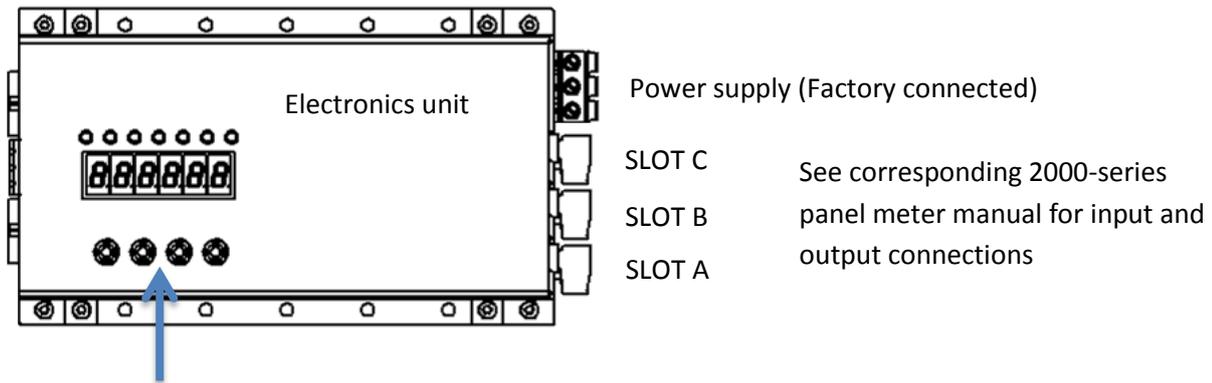
Two cable glands

Configuring

The display unit is configured with the small display and buttons inside the main case.

Electronics unit

To reach electronics unit open the main case as explained before. Use the small display and four buttons to configure the display unit. Programming and input/output connections are explained in 2000-series panel meter manual for each different device type.

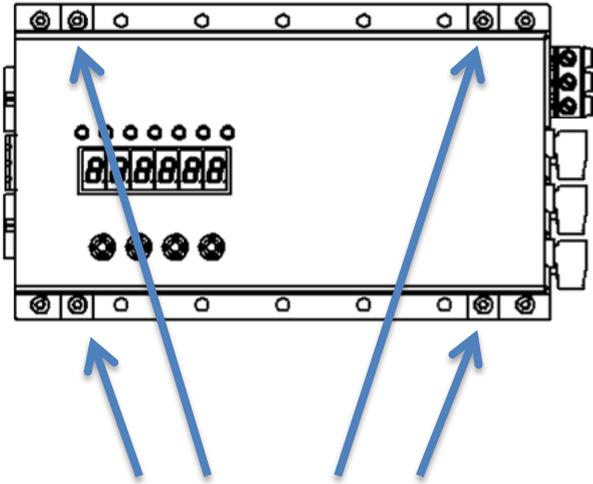


Buttons and display.

Programming is explained in corresponding 2000-series panel meter manual.

Jumper configurations

If corresponding 2000-series manual informs that jumpers need to be changed, see below instructions to reach the jumpers.



1. Detach all connectors

2. Open these 4 screws to open the electronics case lid to reach internal measurement cards

Specifications

Enclosure			
Indoors installation	Allowed	Dimensions	See page 3
Outdoors installation	Allowed	Protection	IP65
Altitude	Max 2000 m	Pollution degree	3
Operating temperature	-10...+50 °C	Weight, 4 digits	5 kg
Storage temperature	-30...+50 °C	Weight, 6 digits	6 kg
Humidity	< 90 %Rh		

Power supply			
Nominal voltage	20...28 VAC / VDC or 41...285 VAC depending on model	Pre-fuse (not required)	>2 AT (24V), not required >1 AT (230V), not required
Frequency	45...65 Hz	Installation category	CAT II
Power	<50 VA	Protection	Enclosure: Class 1, protective earth. Inputs: Class 2, reinforced insulation.

Regulations	
Electrical safety EN 61010-1	
Classification	Fixed equipment, permanently connected equipment, with protective earth

See additional input and output card specifications from corresponding 2000-series manual.

Nokeval

Nokeval Oy, Yrittäjätie 12, 37100 Nokia, Finland,
Tel. +358 3424800, fax. +358 3422066, sales@nokeval.com, www.nokeval.com