Display and Control Unit DCU 400

For PYROSPOT Pyrometers

Overview

Display and control unit DCU 400

Description

The display and control unit DCU 400 is an optionally available accessory. It is used for the visualization of the measurement temperature and the parameterization of the connected pyrometer. All pyrometer parameters can be adjusted during the operation and they influence the measurement of the pyrometer directly. In addition two switching outputs are available that are freely parameterizable too. Combined with the additionally obtainable power supply unit a comfortable stand-alone operation of the pyrometer whtout any other connected devices is possible. There is also the possibility for visualization and recording via the software PYROSOFT Spot or PYROSOFT Spot Pro.

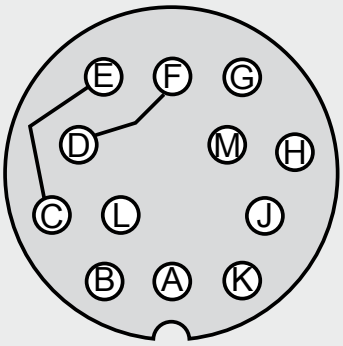
Technical data

Type	DCU 400
Connectors	Clamps for pyrometer connection Clamps for RS-485 DCU 400 or RS-485 connector Clamps for switching outputs DCU 400 12pin plug for power supply and for the wheeling of the pyrometer connectors
Power supply	24 V DC ± 25 %, residual ripple 500 mV, own consumption 100 mA, Please note: When connecting a pyrometer the current consumption of this pyrometer has to be dimensioned additionally to the above mentioned consumption of the DCU 400 (please refer technical data of the pyrometer)
Switching outputs	2x opto relay switching output, potential free, max. 60 V DC/42 V AC_{eff} 500 mA
Protection class	IP65 according to DIN 40050
Display	OLED
Housing dimensions	approx. 110 mm × 80 mm × 40 mm [W × D × H]
Operating temperature	0 °C to 70 °C
Storage temperature	–20 °C to 70 °C
Weight	approx. 500 g
CE symbol	according to EU regulations
Test regulations	EN 55 011:1998

Display and Control Unit DCU 400
For PYROSPOT Pyrometer

Pin assignment 12 pin plug connector

Pins		Function	Wire color
12pin connector Please note: Pin L, B, H and J are looped signals of the pyrometer	K	+ 24 V DC	white
	A	0 V DC	brown
	L	+ analog output 0/4 mA to 20 mA	green
	B	– analog output 0/4 mA to 20 mA	yellow
	H	Pyrometer option: switch pilot light external	gray
	J	Pyrometer option: Delete maximum value external	pink
	F	D+ RS-485	black
	C	D– RS-485	violet
	D	D+ RS-485 bridged internal with F	gray/pink
	E	D– RS-485 bridged internal with C	red/blue
	G	GND RS-485	red
	M	PE/screen (only for cable extension)	green/yellow



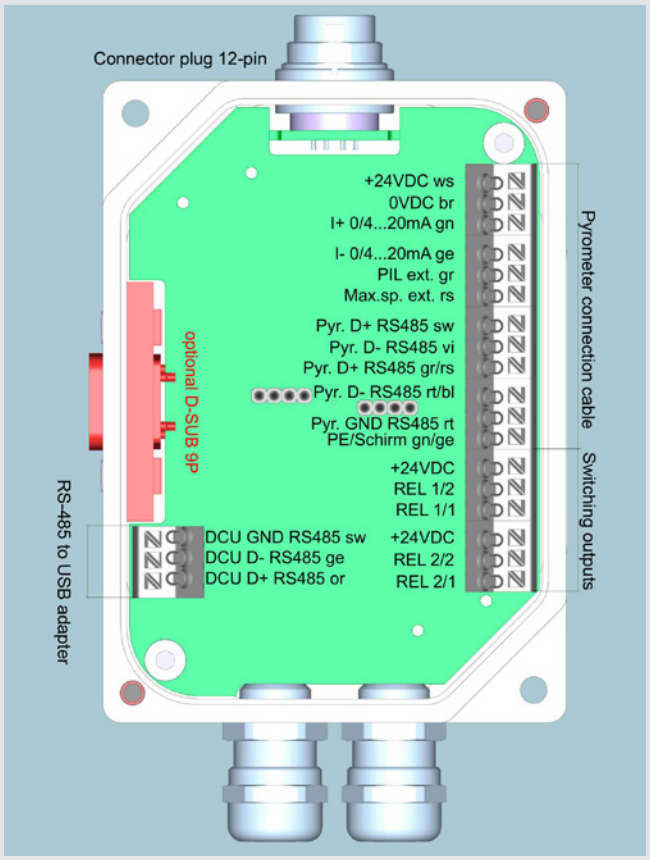
Suitable connector:
straight plug
P/N 99-5630-15-12
angulate plug
P/N 99-5630-75-12

Franz Binder GmbH
www.binder-connector.de

Connections of the power supply

The cover of the device has to be closed before turning on the power supply. Otherwise the display will not be initialized. A direct-current voltage of 24 V DC is needed for the operation of the pyrometer.

Overview of the connectors



Clamps

Clamping strip 1			
+ 24 V DC	Power supply + 24 V DC	Pyr. D+ RS485	D+ RS-485 (bridged) pyrometer
0 V DC	Power supply 0 V DC	Pyr. D– Rs485	D– RS-485 (bridged) pyrometer
I+	+ analog output 0/4 to 20 mA	Pyr. GND RS485	GND RS-485 pyrometer
I–	– analog output 0/4 to 20 mA	PE/Schirm	Potential GROUND, screen
PIL ext.	Functional input, switch pilot light	DCU D+ RS485	D+ RS-485 DCU 400
Max. sp. ext.	Functional input, Delete data storage	DCU D- RS485	D- RS-485 DCU 400
Pyr. D+ RS485	D+ RS-485 pyrometer	DCU GND RS485	GND RS-485 DCU 400
Pyr. D– RS485	D– RS-485 pyrometer		
Clamping strip 2			
REL 1/1	Opto relay 1 pin 1 max. 60 V DC/42 C AC_{eff} 500 mA	REL 2/1	Opto relay 2 pin 1 max. 60 V DC/42 C AC_{eff} 500 mA
REL 1/2	Opto relay 1 pin 2 max. 60 V DC/42 C AC_{eff} 500 mA	REL 2/2	Opto relay 2 pin 2 max. 60 V DC/42 C AC_{eff} 500 mA
+24 V DC	looped current voltage + 24 V DC	+24 V DC	looped current voltage +24 V DC

Part numbers: 3310A13400 (with DCU RS-485 clamps, without RS-485 connector D-SUB 9P)
3310A13410 (without DCU RS-485 clamps, with RS-485 connector D-SUB 9P)

We are certified
for many years
according to
ISO 9001

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