DD2050

Hopper Scale

datasheet

BILANCIAI GROUP

The BILANCIAI DD2050 HS terminal is a control device for discontinuous totalising systems in the load weighing field in bulk. The device can be installed outdoors and it is designed to withstand most severe work conditions.

The load cells placed in the central hopper are directly connected to the high speed precision analog/digital converter inside the terminal.
A colour 12" display with touch screen allows the operator to manage the process and enter all the data by means of a complete alphanumeric pushbutton panel. The entire process can be controlled by a graphic interface on the display, which updates automatically.
The software provided contains scale control programs, user interface (to configure the process, product data, extraction cycle setting, test procedures), error management and process management. The DD2050HS can be equipped with incorporated printer to record weight data and accessory functions; it can also be connected via Ethernet network or fieldbus to export and/or import data.
The DD2050HS is manufactured in compliance with MID directive and OIML (Certification in the process of being released) recommendations and it can be used in systems with a resolution up to 3000 divisions.
The DD2050HS controls the opening/closing commands of the hoppers by means of I/O contacts, which must be connected to an external PLC.

Characteristics of the DD2050HS:
- Controller for discontinuous totaliser
- It is suitable for converting/renewing existing systems or for new systems
- Industrial hardware with different assembly options
- High-visibility colour 12” display with touch screen
- Intuitive menu
- Screen alphanumeric pushbutton panel or external via USB
- Screen system overview
- Information on the state of the system shown on the display
- Internal database for managing products, clients, transport, totals etc.
- Fall compensation algorithms, which can be adapted to each product
- It can be integrated with management and control systems via Ethernet network or fieldbus
- Two serial outputs to connect peripheral devices such as weight repeater ID devices, etc.
- Assistance and alarm remote via Ethernet network and e-mail

TERMINAL DD2050HS INPUT CONTACTS:
- IN_EXTERNAL_EMERGENCY_STOP_EMSI
- IN_OPERATION_AT_THE_OPPERSCALE_RCTR
- IN_AIR_PRESSURE_AIR
- IN_LOW_LEVEL_SWITCH_IN_UPPER_HOPPER_UPB
- IN_HIGH_LEVEL_SWITCH_IN_WEIGHT_HOPPER_OVFL
- IN_HIGH_LEVEL_SWITCH_IN_LOWER_HOPPER_LWB
- IN_LIMIT_SWITCH_ON_FEED_GATES_SFG
- IN_LIMIT_SWITCH_ON_DISCHARGE_GATE_SDG
- IN_EXTERNAL_FILLING_CONDITION_EXFC
- IN_EXTERNAL_DISCHARGE_CONDITION_EXDC
- IN_EXTERNAL_START_COMMAND_STRT
- IN_EXTERNAL_STOP_COMMAND_STOP
- IN_HOPPER_SCALE_STABILIZED_STAB

TERMINAL DD2050HS OUTPUT CONTACTS:
- OUT_EMERGENCY_STOP_EMSO
- OUT_IN_ACTION_INA
- OUT_ALARM_ALRM

- OUT_COMMAND_FEED_GATE_1_FAST_CFG1
- OUT_COMMAND_FEED_GATE_1_SLOW_CFG2
- OUT_COMMAND_FEED_GATE_1_CFG3
- OUT_COMMAND_FEED_GATE_1_CFG4
- OUT_COMMAND_DISCHARGE_GATE_CDG
- OUT_LOW_LEVEL_SWITCH_UPPER_HOPPER_SIMULATED_UPBS
- OUT_RELEASE_CHECKWEIGHING_ON_HOPPER_SCALE_RCW
- OUT_TOTAL_REQUIRED_OPERATION_WEIGHT_REACHED_TNWR
- OUT_WEIGH_HOPPER_IN_RESIDUE_WEIGHT_RDWB
- OUT_STOP_SITUATION_ACST
- OUT_START_CONDITIONS_FULFILLED_STLA
- OUT_STOP_FUNCTION_ENABLED_SPLA
- OUT_LOCK_BY_STABILISATION_UNIT

Possible system with 3 hoppers connected to PC to control the system state

General

Weighing function

- Reset, Tare, Test, Stability, extraction control

Operating modes

- Manual, Automatic, Remote

Operations

- Start, Stop (full/empty), End, Restart

Software

- Automatic control of the extraction sequence
- Single extraction weight, cycle number, total and optimisation of the single extraction
- Restart after power failure
- Management of the levels in the upper and lower hopper
- Hourly flow rate calculation
- Totals

Report

- Information can be printed or exported to PC

Technical specifications

Display

Colour 12” (10.4” for desktop applications) with dust and water-resistant touch screen

Keyboard

Touch screen or external PC type that can be connected to USB port

A/D Convertor

20 bit, Conversion speed can be selected from 1 to 100 c/s
Cell power supply 10V, sensitiveness 0.7 uV per division
Calibration via software

Processor card

CPU 32 bit 500 MHz at low consumption
128MB program memory, 128MB ram
Real time clock
Expansion bus up to 3 optional cards

Communications

1 Ethernet port 10/100
2 USB ports
2 RS232/422 serial ports
Up to 16 I/O 24V ac/dc 200mA

Printer

Internal. Thermal, module width 80 mm
External: different printers available, verify the requirements

Connection

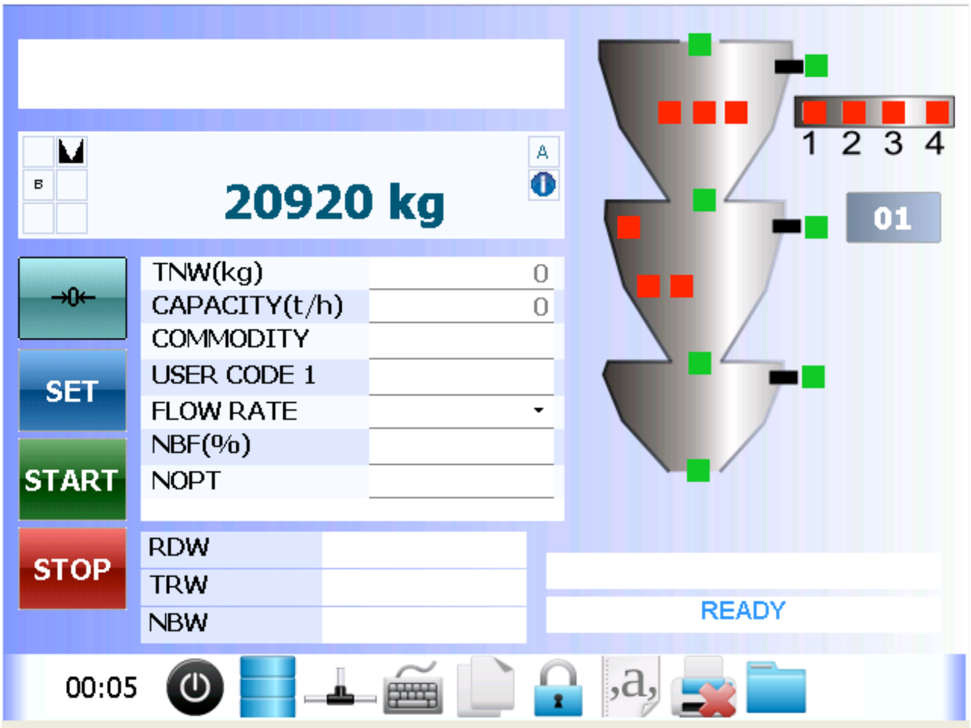
Connection to remote control software in Master/Slave mode

Power supply

110-230 VAC 50/60 Hz, 150 W maximum
12 V optional (only for desktop version)

Temperature

Work Temperature -10/+50 °C
Storage Temperature -10/+70 °C

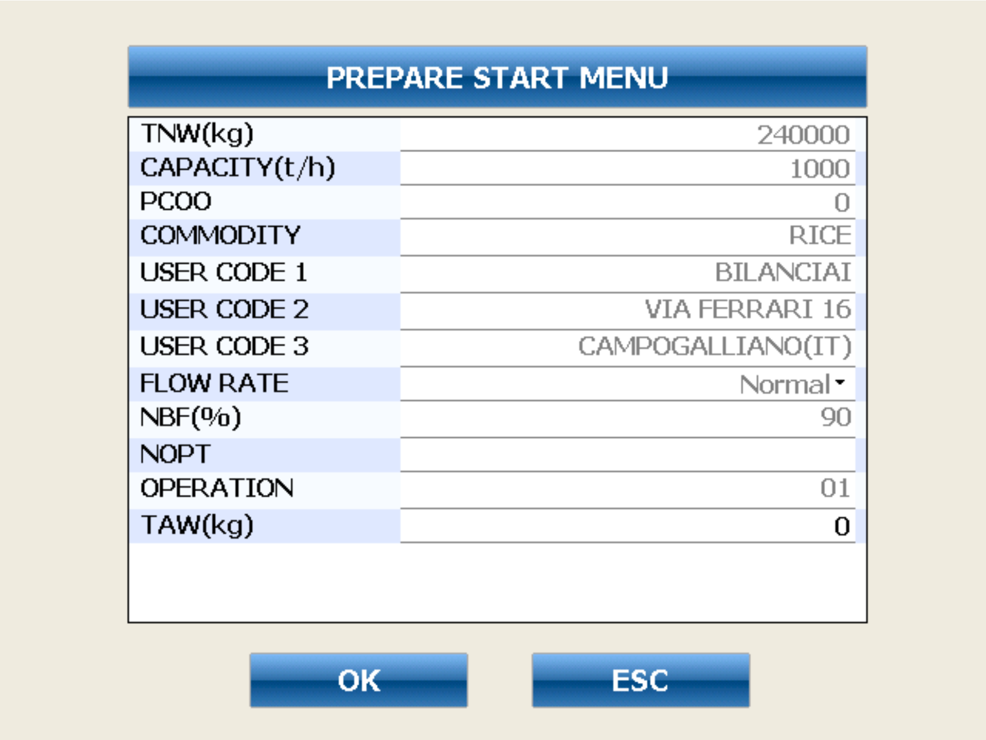


20920 kg

TNW(kg)	0
CAPACITY(t/h)	0
COMMODITY	
USER CODE 1	
FLOW RATE	
NBF(%)	
NOPT	

RDW	
TRW	
NBW	

READY



PREPARE START MENU

TNW(kg)	240000
CAPACITY(t/h)	1000
PCOO	0
COMMODITY	RICE
USER CODE 1	BILANCIAI
USER CODE 2	VIA FERRARI 16
USER CODE 3	CAMPOGALLIANO(IT)
FLOW RATE	Normal
NBF(%)	90
NOPT	
OPERATION	01
TAW(kg)	0

NOTE:

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