Domino

Product Manual

Essential User Information

M230i-T4

M230i-T6

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DOMINO M230i-T4/T6 LABELLER

This manual, Domino part no. EPT026458 has been produced for use in the installation and operation of the Domino M230i-T4/T6 Labeller, and to reinforce and complement any training program available with the product. It is not designed to replace any such training program.

Users of this Labeller are warned that it is essential to read, understand and act according to the information given in “SAFETY PRECAUTIONS” on page 1. This part of the manual also specifies warnings, cautions and notes which are used elsewhere in the manual. It is, therefore essential that users are also familiar with these and act accordingly.

Domino will not accept any liability for damage to equipment or injury to personnel caused by unauthorised or improper use of the Labeller.

Domino Printing Sciences plc has a policy of continuous product improvement.

The Company, therefore reserves the right to modify the specification contained in this manual without notice.

For sales and service assistance please visit our website for local technical support:

http://www.domino-printing.com/

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CONTENTS OF EC DECLARATION OF CONFORMITY

No. Doc-0010826-R02

Manufacturer: Domino Print & Apply AB

Manufacturer address: Domino Print & Apply AB, Agnesfridsvägen 189, 213 75 Malmö SWEDEN.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Object of the declaration: Domino M230i-T4 and M230i-T6 Labellers including:

Domino M230i-T4-L	Domino M230i-T6-L
Domino M230i-T4-R	Domino M230i-T6-R

From serial number 208000

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:
2006/42/EC : Machinery Directive
2014/30/EU : EMC Directive
2011/65/EU : RoHS Directive

EN ISO 12100:2010	Safety of machinery - General principles for design. Risk assessment and risk reduction
EN 60204-1:2006/A1:2009	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
EN 61000-6-2:2005	Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments
EN 61000-6-4:2007/ A1:2011	Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emissions standard for industrial environments

Additional Information

Compliance is dependent upon installation and use in accordance with the Product Manual supplied.

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Signed for and on behalf of

Domino Print & Apply AB

Agnesfridsvägen 189

SE- 213 75 Malmö, Sweden

Date: 21/10/2016

Signature:

Name and Job title: Rikard Malmback, Managing Director (Domino Print & Apply AB)

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PART 1: INTRODUCTION

CONTENTS

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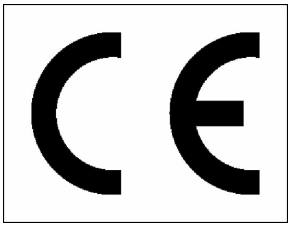
INTRODUCTION

Identification and CE mark

All machines have an equipment sign for identification of the machine. The equipment is CE-marked; ensuring that the equipment is designed, manufactured and described in conformity with the Machinery Directive 2006/42/EC, Annex 2A.
A CE-marked machine is followed by an
EC Declaration of Conformity.



CE Mark

Machine identification – Serial number label

Each machine is supplied with a serial number label. The label contains the following information:

Type =	The name of the product
P/N	Part number
S/N =	Serial number
Date =	Manufacturing date

The CE mark is placed on the serial number label.

When ordering spare parts or ancillary equipment, it is beneficial to have all the information shown above available, to ensure the correct parts and/or firmware is supplied.

The serial number label is normally positioned on the top of the Printer.

The Declaration of Conformity

See page 5 in the manual.

DOCUMENT INFORMATION

Purpose of this User Information

The purpose of this User Information, from now on named manual, is to provide technicians and operators with information on how to safely install and operate this equipment.

Please read and follow the instructions and information in this manual and ensure that this manual is always available to all personnel involved in installing, operating or maintaining the equipment.

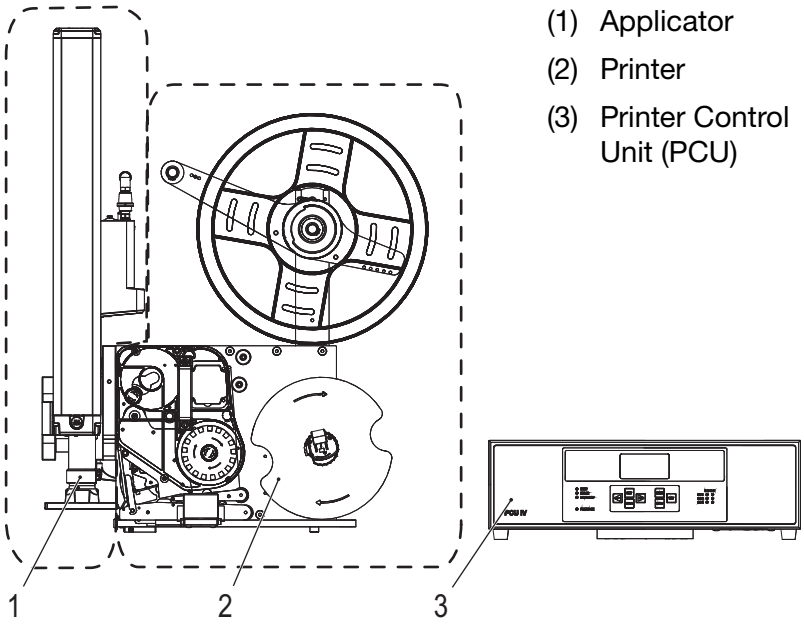
It is important to:

- keep the manual for the life of the equipment
- pass the manual on to any subsequent holder or user of the equipment

A Technical manual is available on a USB memory. This document holds technical instructions intended for use by specialised personnel mandated by Domino or authorised representatives.

LABELLERS – EQUIPMENT INFORMATION

The M230i-T4 and M230i-T6 Labellers are designed for printing and applying labels. There are different variants of the M230i-T4 and M230i-T6 Labellers. A labeller consists of three modules.



(1) Applicator

(2) Printer

(3) Printer Control Unit (PCU)

The illustration shows M230i-T4-Right

MACHINE MODULES

Printer

The printer is a Thermal Transfer type that can print onto virtually any type of label material.

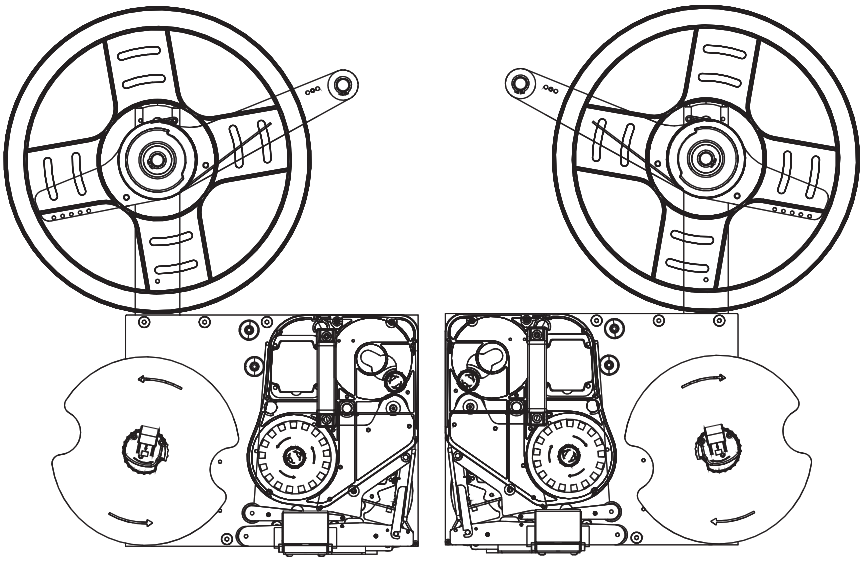
The Thermal Transfer printer uses a very thin transfer ribbon positioned between the print head and the label, and the ink on the ribbon surface is melted onto the label. The prints are light resistant.

Available printers:

- Thermal Transfer printer (width): T50i (4 in) T60i (6 in)
- Resolution: 12 dots/mm (300 dpi)

Printer design

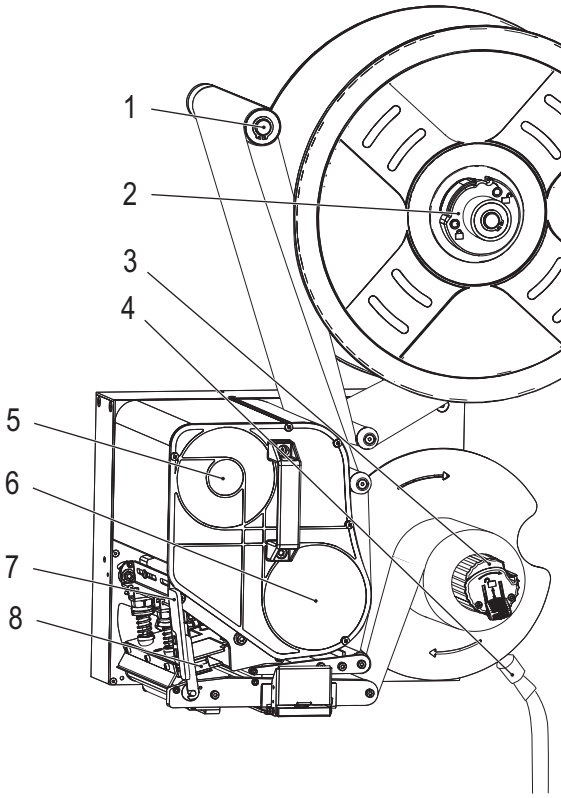
The printers are designed so the label and ribbon rollers together with the print head, are accessible from the **Operator side**. The opposite side, the **Service side,** holds the driving belts, cables and an electronic circuit board which are concealed under a cover plate.



Left hand version Right hand version

Note: Printers are available in mirrored versions: Left and Right. The front of the printer is defined as the area in which the print head is mounted.

Main parts of the Printer



(1) Dancing arm
(2) Label un-winder
(3) Backing paper re-winder
(4) Printer cable
(5) Ribbon take-up
(6) Ribbon supply
(7) Print head lifting handle
(8) Print head

Note: Small differences can be found between the printer models, but the general construction is the same.

The **print head** is mounted at the front of the printer and can be raised to access the labels and ribbon by turning the **print head lifting handle**.

A **ribbon guide** is located in front of the **print head** (see next page). The ribbon guide allows the ribbon and labels time to cool down, ensuring that the text adheres to the label.

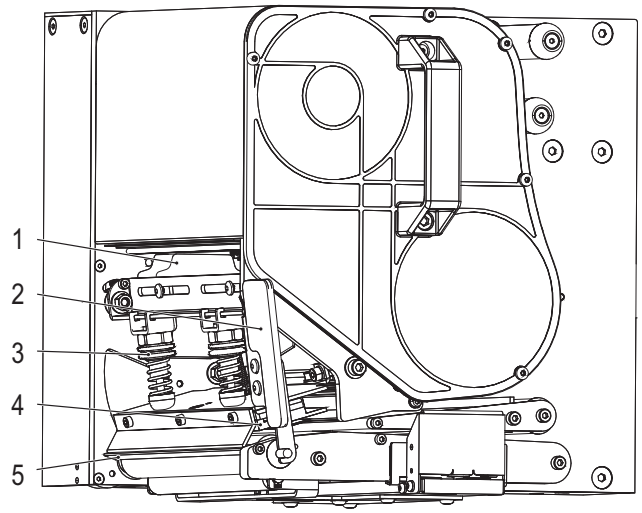
Prior to the label arriving at the print head, it passes a **label gap sensor.** With its signal the printer calculates the length of the label and keeps track of the exact location of the label edge. The printer will automatically stop if the label gap sensor detects that the label supply is used up.

The printer has two **stepper motors** which are used for advancing or feeding out labels and ribbon.

A **low level ribbon** sensor provides a warning if the ribbon level is low and stops the printer if the ribbon supply is used up.

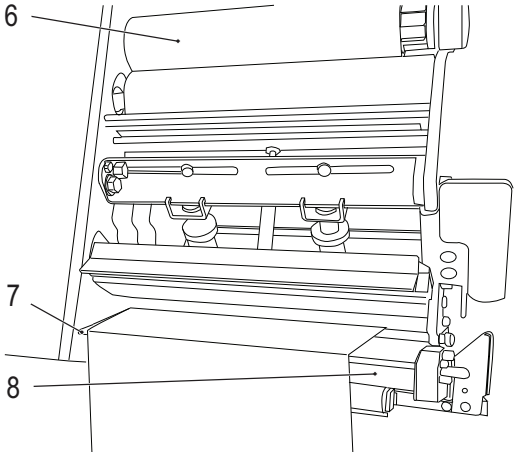
A **low level label** sensor provides a warning signal when the label roll is about to run out.

Print head down



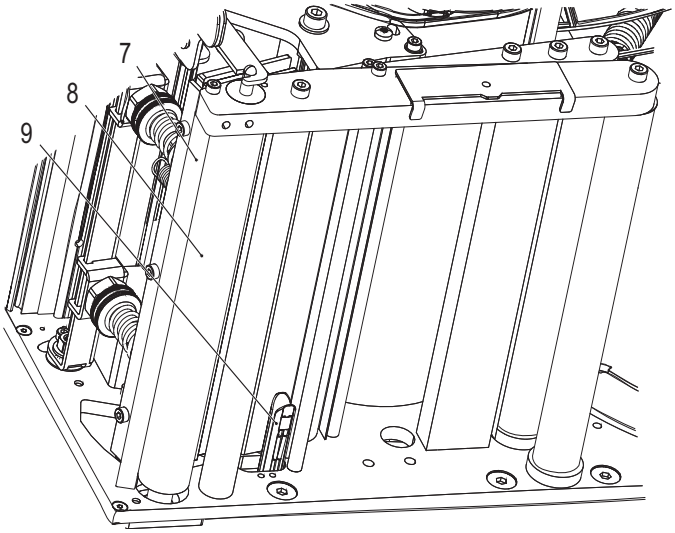
(1) Stepper motor
(2) Print head lifting handle
(3) Print head pressure device
(4) Print head
(5) Ribbon guide

Print head up



(6) Ribbon take up roller
(7) Dispensing beak
(8) Platen roller

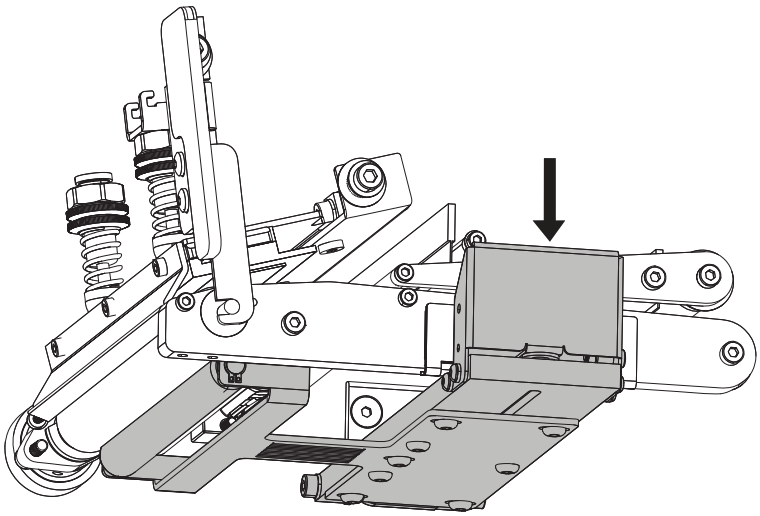
Printer underside (without peel roller)



(9) Label-gap sensor

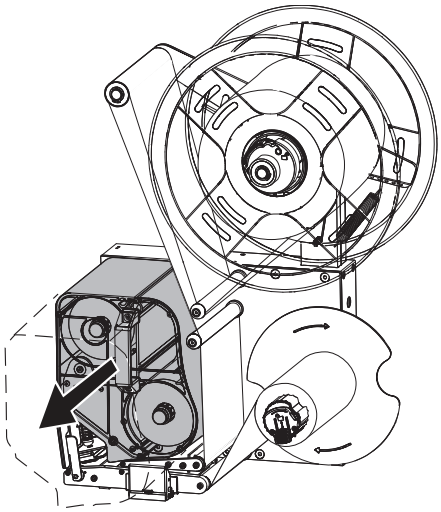
Peel roller

The peel roller (highlighted in grey below) is mounted under the platen roller and ensures sufficient contact between backing paper and platen roller for accurate label feed. The peel roller is necessary for large label rolls, it extends the safety margins and reduces the maintenance time. When changing labels, the peel roller must be open. Pull down the handle (arrow) to open. When the labels have been exchanged; close the peel roller. A micro switch controls that the peel roller is in the locked position. Otherwise, the printer will not start.



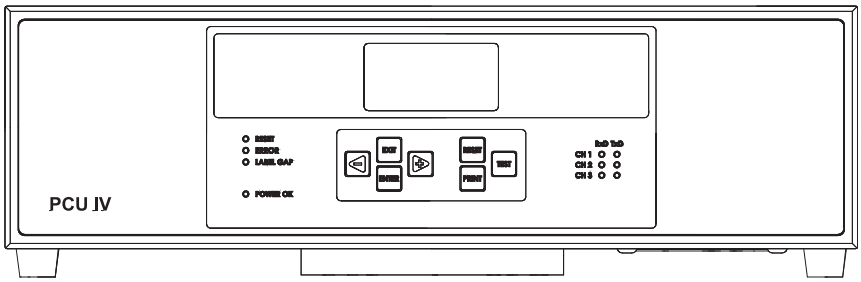
Hood

The protective hood (highlighted in gray below) protects the ribbon from dirt. When changing ribbon, the hood must be removed. Grab the handle and pull out. When the ribbon has been exchanged; put back the hood. An inductive sensor monitors that the hood is in position. Otherwise, the printer will not start.



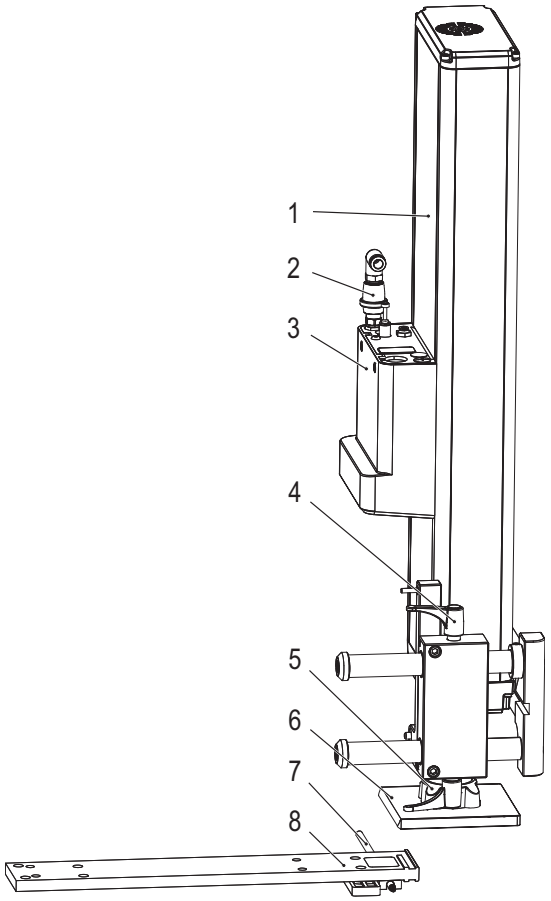
PCU

The Printer Control Unit (PCU) controls the operation of the printer. The PCU is also equipped with an ACC (Application Control Card) that controls the applicator. The ACC is capable of controlling applicators having numerous of cylinders and is mounted inside the PCU.



Applicator

The Applicator is mounted in front of the printer/labeller and can apply labels either on stationary or on moving objects. The Applicator's main parts are a moving cylinder with a piston and an applicator pad.



(1) Applicator module
(2) Shut off valve
(3) Control module
(4) Applicator holder lever
(5) Pad adaptor
(6) Applicator pad
(7) Assist blow
(8) Mounting rail

Options

The M230i-T4 and M230i-T6 Labellers can be equipped with optional accessories, these accessories are not part of the ordinary scope of supply, but can be ordered separately:

- Wi-Fi
- Beacon tower light
- Trigger sensors
- Pneumatic kit
- Touch panel interface
- Floor stand
- Pneumatic Corner Wrap Brush
- Machine stop/Emergency stop.

Please contact Domino for a current list of M230i-T4 and M230i-T6 series accessories.

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PART 2: SAFETY PRECAUTIONS

CONTENTS

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SAFETY PRECAUTIONS

To ensure maximum safety, always read this section carefully before doing any work on the equipment or making any adjustments.

Information - Warning, Caution & Notes

WARNINGS, CAUTIONS and **Notes** used throughout this manual are highlighted by use of international hazard symbols. The following definitions of all three special notices are shown below in the way that they are presented in the manual.

WARNING: **A WARNING is given to alert the reader of possible hazards which may cause loss of life, physical injury or ill health in any form.**

WARNINGS fall into two categories, those due to hazardous materials and those due to hazardous operations. Where appropriate, a second international hazard symbol is used for specific hazards.

CAUTION: *A CAUTION is given to alert the reader of possible hazards which may cause damage to the equipment.*

Note: *A Note is used to convey, or draw attention to, information that is related to the immediate subject of the text.*

Warning signs

Following signs can be found on the machine.

Risk of pinching

Laser (option)

The following safety instructions concern all work carried out on the machine as well as in the area close to the machine. Local restrictions concerning the specific factory should to be taken into consideration.

PERSONNEL

Only skilled or instructed personnel are allowed to work on the equipment. The manufacturer declines all responsibility for injury or damage if the instructions in this manual are not followed.

Personnel are responsible for:

- The equipment and the work area around the equipment
- All personnel in the vicinity of the equipment
- Making sure that all safety devices are fully operational.

Personnel must regard all electrical equipment as live. In general, switch off all electrical connections and compressed air to the Labeller before carrying out maintenance or repair work.

Electricians

Electricians should be certified according to local regulations and have experience of similar types of installations, proven skills in reading and working from drawings and cable lists, and knowledge of local safety regulations regarding automation.

WARNING: Work with electrical equipment must only be performed by skilled or instructed technicians.

According to EN 60204-1, 3.28 an instructed person is:

– An individual adequately advised or supervised by a skilled person to enable that individual to avoid hazards which electricity can create (e.g. operating and maintenance staff).

According to EN 60204-1, 3.52 a skilled person is:

– An individual with technical knowledge or sufficient experience to enable that individual to avoid hazards which electricity can create.

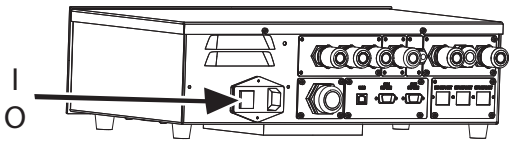
GENERAL SAFETY PRECAUTIONS

Maintenance work on the Labeller

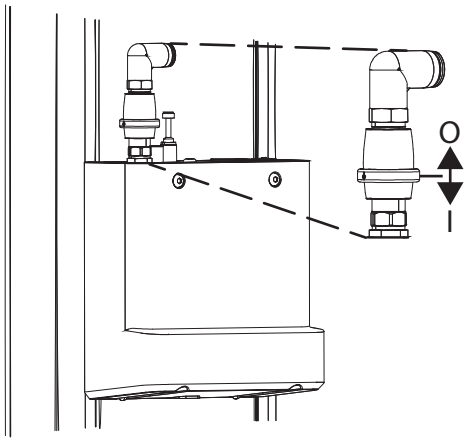
Before any maintenance work is done inside the machine, always remember to:

(1) Stop the Applicator, *see section: "Stop apply" on page 5-5.*

(2) Switch off the Applicator's main switch.



(3) Use the valve at the top of the control module to turn the air ON/OFF. The shut off valve is a ventilating valve, which will de-pressurize the air system when compressed air is switched OFF.



Note: The following instructions are only necessary for work inside protective covers.

(4) Remove, if necessary, guards and protections.

Remote control

WARNING: The Applicator can be remotely started, stopped and accessed from a supervision unit or the production line's control system. To disable remote start of the applicator, disconnect the applicator according to step (1) to step (3).

Compressed air

WARNINGS: (1) Contaminated compressed air may cause unpredictable behaviour of machine valves.

(2) Do not change the settings of air pressure on the machine. Higher pressure can result in injury and may damage the equipment.

Liquids

WARNING: Never pour water or any other liquid onto the equipment.

Cleaning

CAUTION: Never use unapproved solvents on any surface of the equipment. Use only manufacturer's approved cleaning wipes for cleaning.

MACHINE SAFETY DEVICES

Machine stop and Emergency stop

The Labeller is designed for a **Machine stop (optional)**. The stop can work as a Machine stop that only stops the tamp applicator.

The air is switched off immediately and the system is de-pressurized when activating the machine stop.

To restart the machine after it has been stopped, the Reset button must be pressed.

When the Reset button is pressed, the air slowly returns to the machine and it is ready to use.

An **Emergency stop (optional)** can be connected to a Labeller. The Emergency stop stops a part of the production line. Site specific procedures need to be perform before re-starting the equipment after an Emergency stop.

Note: It is recommended to note the location of the Machine Stop button or Emergency Stop button in order to stop the equipment in case of danger to people or damage to the equipment.

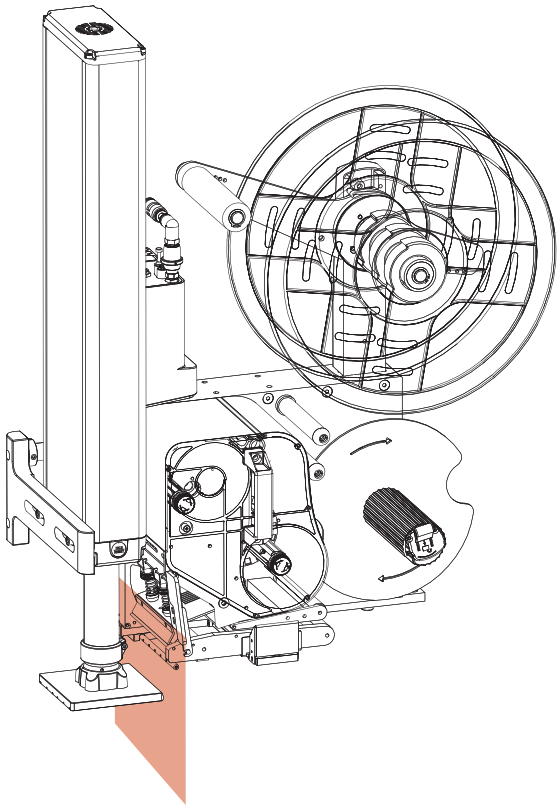
Applicator

The Applicator is designed to minimize risk of personal injuries. It is designed so in normal operation:

- the Applicator will return to its home position if it hits an object
- if the Applicator hits an uneven object, the applicator pad will slightly tilt
- if the Applicator cycle times out, without hitting an object, it will return to its home position and enter an error mode. To reset the Applicator from error mode, press and hold the IDLE/RESET button. See “Idle/Reset apply” on page 5-7
- if the Applicator hits an object while returning to its home position, it will stop and enter an error mode. To reset the Applicator from error mode, press and hold the IDLE/RESET button. See “Idle/Reset apply” on page 5-7.

Risk area

The risk area is the area between the dispensing beak and the applicator pad. The machine is designed to stop if an object obstructs in this area.



The main risk is pinching fingers when the Labeller returns to its home position. If this happens, the applicator pad will slightly tilt. Always ensure that hands and fingers are kept away from the machine when it is operating.

WARNING: Risk of pinching fingers. Always switch off air supply before accessing this area for maintenance.

NOISE LEVELS

Domino have no control over specific site conditions, duration of use, state of maintenance or adjustment of the machine. The following noise level data are measured on the smallest and the largest of the T4-T6 Labellers.

Sound pressure level on T4-R:

WARNING: It is recommended to use Ear defenders with good attenuation in the 63-8000 Hz frequency range.

The maximum measured acoustic power level L_{pA} is 83.7 dB(A) measured on the machine, when the blow function in the pad is used. It is measured in accordance with EC Directive 2006/42/EC. It is recommended to use ear defenders.

Sound peak level on T4-R:

The maximum sound peak level L_{pCpeak} is 82.5 dB(C) measured in accordance with EC Directive 2006/42/EC.

Sound pressure level on T6-L:

WARNING: It is recommended to use Ear defenders with good attenuation in the 63-8000 Hz frequency range.

The maximum measured acoustic power level L_{pA} is 81.4 dB(A) measured on the Tamp applicator when the blow function in the pad is used. It is measured in accordance with EC Directive 2006/42/EC. It is recommended to use ear defenders.

Sound peak level on T6-L:

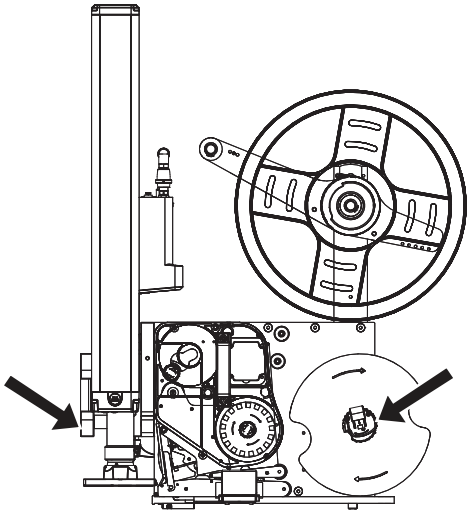
The maximum sound peak level L_{pCpeak} is 86.7 dB(C) measured in accordance with EC Directive 2006/42/EC.

Ear defenders with good attenuation in the 63 - 8000 Hz frequency range should be used.

LIFTING THE EQUIPMENT

Manual lifting

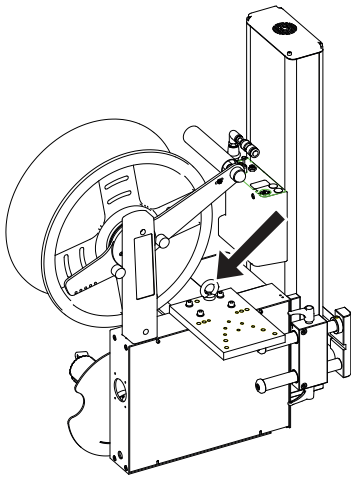
CAUTION: It is recommended that two persons lift the Labeller by the Applicator holder (left arrow) and the Backing paper re-winder (right arrow) to avoid damages to the equipment. Never lift the equipment by the dancing arm.



Lifting device

CAUTION: Risk of tilting and damage! Use the lifting eye bolt (arrow) on top of the printer to lift the equipment. The centre of gravity is not in position straight below the lifting eye bolt, so the equipment tilts slightly when lifted. It is important to avoid entangling the lifting device in the dancing arm.

CAUTION: The centre of gravity of the equipment is calculated without any media. Remove label rolls before lifting the equipment.



PART 3: TECHNICAL DATA

CONTENTS

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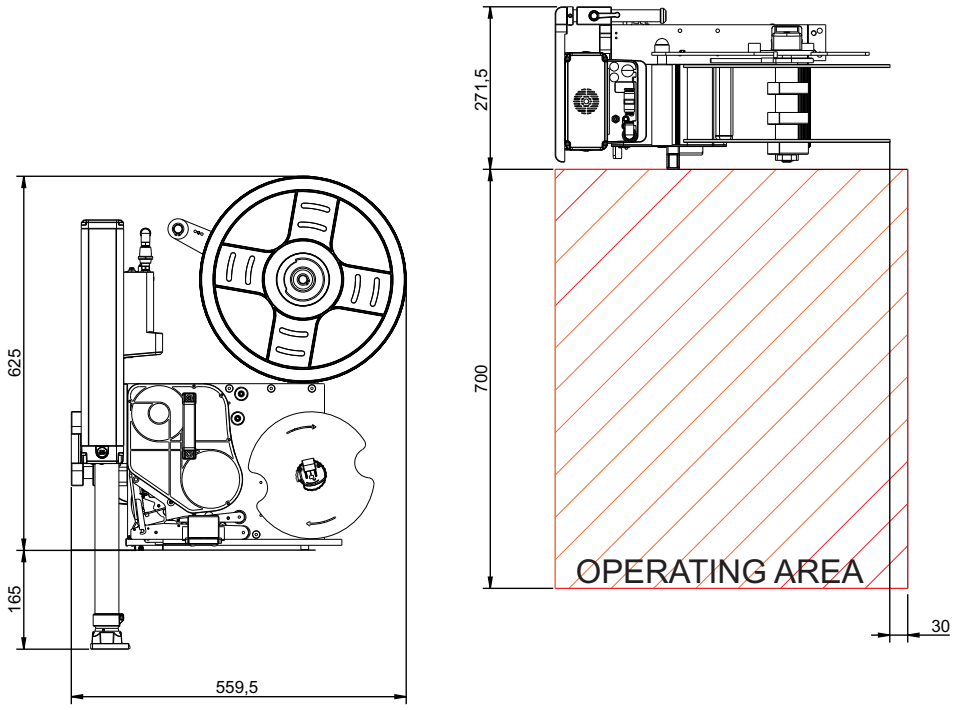
TECHNICAL DATA

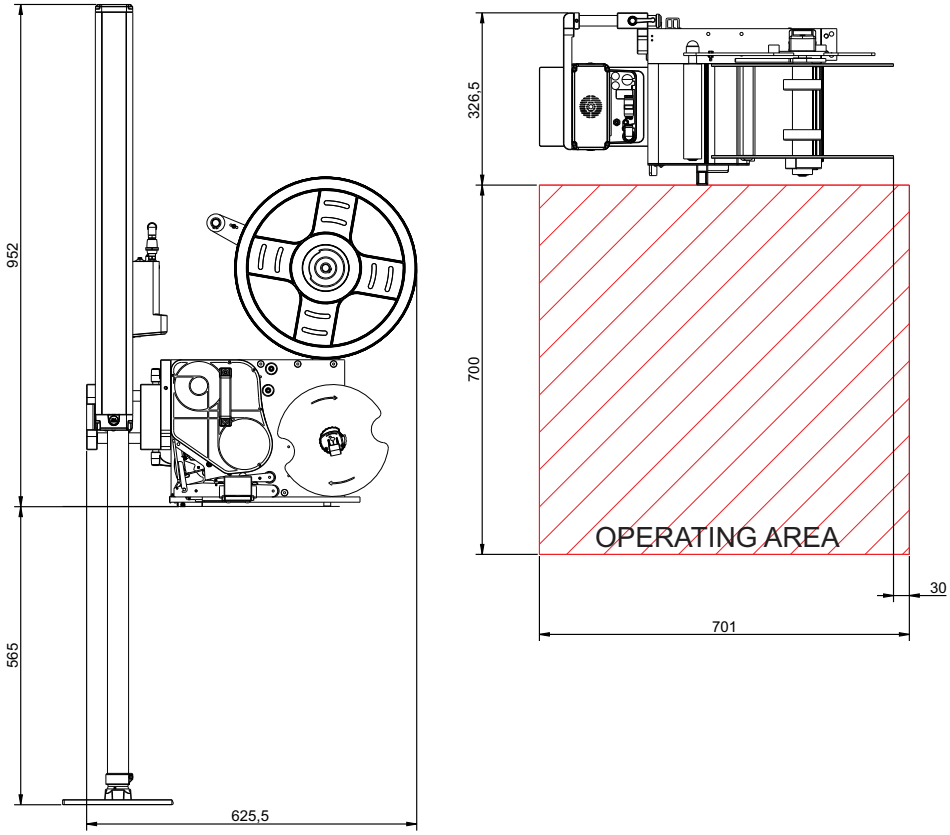
The technical data for M230i-T4 and M230i-T6 Labellers are represented by smallest and largest models. There are minor deviations in the data of the models in between, but they are not presented here, except pads and labels sizes.

Measurements - M230i-T4-R (200mm)



Note: Heights, lengths and widths may differ depending on configuration.

Measurements - M230i-T6-R (600mm)



Note: Heights, lengths and widths may differ depending on configuration.

Labeller	M230i-T4	M230i-T6
Dimensions	See drawings	
Total weight	32.0kg	36.7kg
Applicator weight	6.6kg	8.9kg
Printer weight	17.7kg	20.2kg
Mounting kit	1kg	
Power supply Mains input	90-250VAC	
Power consumption **(230 VAC/50 Hz)** Maximum operating current/power: Average operating current/power: Standby current/power:	 1.27A/292W 0.62A/142W 0.263A/60W	 1.4A/321W 0.59A/135W 0.27A/62W
Power consumption **(115 VAC/60 Hz)** Maximum operating current/power: Average operating current/power: Standby current/power:	 2.55A/293W 1.19A/137W 0.4A/45W	 3.0A/345W 1.13A/130W 0.39A/45W
Recommended air pressure:	6 bar	
Typical air consumption Maximum air flow (peak): Label in standby: Application (one cycle): Assist blow: Assist blow and applicator pad:	 282 litres/min 172 litres/min 6 liters 88 litres/min 225 litres/min	 292 litres/min 179 litres/min 12 liters 87 litres/min 233 litres/min
Noise level Highest peak level recorded:	83.7 dB(A)	81.4 dB(A)

Labeller	M230i-T4	M230i-T6
Print head width	108mm	162mm
Resolution	12 dots/mm	
Web width max width of backing paper	111mm	169mm
Label roll - Max diameter See also PART 6 : SELECTION OF MEDIA/ LABELS	340mm	
Label roll - Inner diameter See also PART 6 : SELECTION OF MEDIA/ LABELS	75.5 - 77.3mm	
Label roll - Max length	600m	
Label - Max width	111mm	166mm
Label length	40 - 600mm	
Ribbon - Max length	600m	
Ribbon - Max roll diameter	90mm	
Ribbon - Recommended Inner roll diameter	25 - 26.2mm	
Applicator type	Tamp	
Pad size (order specific) (width x length)	50 x 66mm 80 x 66mm 110 x 66mm 110 x 110mm	110 x 160mm 150 x110mm 150 x 210mm
Label - Max size (width x length)	50 x 66mm 80 x 66mm 110 x 66mm 110 x 110mm	110 x 160mm 150 x110mm 150 x 210mm
Stroke max. operating length (order specific)	160mm 260mm 360mm	
Max printer speed	300mm/s	200mm/s

Labeller	M230i-T4	M230i-T6
Recommended printer speed	200mm/s	125mm/s
Recommended highest cycle speed.	1.3 seconds 45 labels/min	3.5 seconds 17 labels/min
Max recommended linear speed of conveyor	30m/min	
PCU dimensions Including cable glands and mounting plate.	405 x 280 x 130mm	
PCU weight	7kg	
Main fuse (PCU) Located in the mains inlet and is the same for all voltages.	6.3A	
Power supply outputs +5V - Motherboard, TG300, Ethernet/Wlan	Max output 1.5A	
+24V - ACC	General output 1A	
+24V - Print head	Max output 1.2A Peak 2A	
-12V & +12V - RS232	Continuous 8A Peak 45-50A	
+45V - Stepper motor The motor voltage has a separate 0V reference	0.05A General output 2-3A Max output 6A	
Operating temperature	+5ºC to +40ºC	
Relative humidity (RH)	20%-85%	
Interfaces Serial RS232, 4800 to 115200 baud	2	
USB (on PCU)	1	
Ethernet	1	

Labeller	M230i-T4	M230i-T6
CPU for Printer, on motherboard	2 x 32 MHz	
Memory True Type fonts and graphic, flash	8MB	
Label text, battery backed up RAM	2MB	
Print area/label bitmap	2 x 1MB	
Internal s/w memory, flash	2 x 128kB	
Internal program memory, RAM	512kB	
Maximum number of fonts in the memory	30	
Maximum number of graphics in the memory	100	
Maximum number of labels in the memory	1200	
Maximum number of labels that can be addressed from the front panel	500	
Maximum label queue from Windows driver	5-15 labels	
Firmware Required ACC firmware	7.00R2 or later 3.70 or later	
Configuration Required M-setup version	4.85.2 or later	
Graphic backlit display	128 x 64 pixels 4 x 18 characters in text mode	
Keys, Setup and control.	7	
LEDs status and communication	Two Red Four Yellow Four Green	

Labeller	M230i-T4	M230i-T6
Inputs PNP (fixed) PNP/NPN switchable (Scanner Good Read)	30 1	
Input range Nominal voltage Operating range Nominal input current Variations depending of the input voltage (Inputs are referring to ACC/controller 0VDC)	24VDC 9-36VDC 2mA 1-3mA	
Outputs (CPU) NPN (fixed) Relay (max load 250VAC, 2A)	21 10	
CPU For applicator controller/ ACC	1 x 88MHz	

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PART 4: INSTALLATION

CONTENTS

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SITE REQUIREMENTS

WARNING: Do not install the Labeller in hazardous environments or in proximity to any flammable solvents or gases.

The Labeller should be mounted securely in the desired location. It should not be placed close to any heat source or in direct sunlight. It should not be located in any hazardous environment, or in close proximity to any flammable solvents or gases. The Labeller is not suitable for outdoor use.

The Labeller is specified for operation in the following environmental conditions:

Temperature

Standard unit (no accessories): +5 to +40ºC

Humidity

Standard unit (no accessories): 20% to 85% non-condensing

PRE-INSTALLATION

Please consider the optimal installation before commencing work:

- Correct height
- Position and orientation
- Conveyor direction
- Operator side etc.

Note: Consider necessary access for cleaning, label changes and routine maintenance.

Read the bill of materials. Discuss these issues with the operators responsible for the equipment.

INSTALLATION

The installation consists of three phases:

- Mounting the machine
- Connecting the compressed air supply
- Connecting power supply, I/O signals etc.

All three phases are described on the following pages.

Note: Setup and configuration of the machine must be made by skilled personnel.

MOUNTING THE MACHINE

The M230i-T4 and M230i-T6 Labellers are designed to be mounted in many positions. Normally it is mounted upright but it can also be mounted in an upside-down position or the units can be mounted on their side.

Please contact Domino if you have any questions on how to install the units.

CAUTION: It is recommended that two persons lift the Labeller by the applicator holder and the Backing paper re-winder to avoid damages to the equipment. See for further information *"Lifting the equipment" on page 2-10*

(1) Remove the packaging material from the Labeller.

(2) Position and align the Labeller parallel with the conveyor (90°).

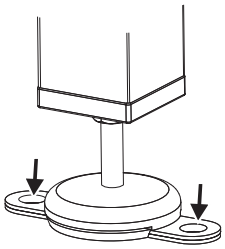
(3) Place the Labeller high enough so that the applicator pad does not hit the conveyor.

Note: Consider the work height for exchange of label rolls and ribbons.

(4) Stop the conveyor, manually pull out the cylinder and make sure the applicator pad is parallel to the product's surface and at the correct height before the equipment is fastened.

CAUTIONS: (1) If mounted to a stand it is important that the machine is securely fastened to the stand.

(2) If possible, fasten a floor stand to the floor or conveyor system to ensure that the equipment will be unaffected by extreme vibration and risk of tilting.



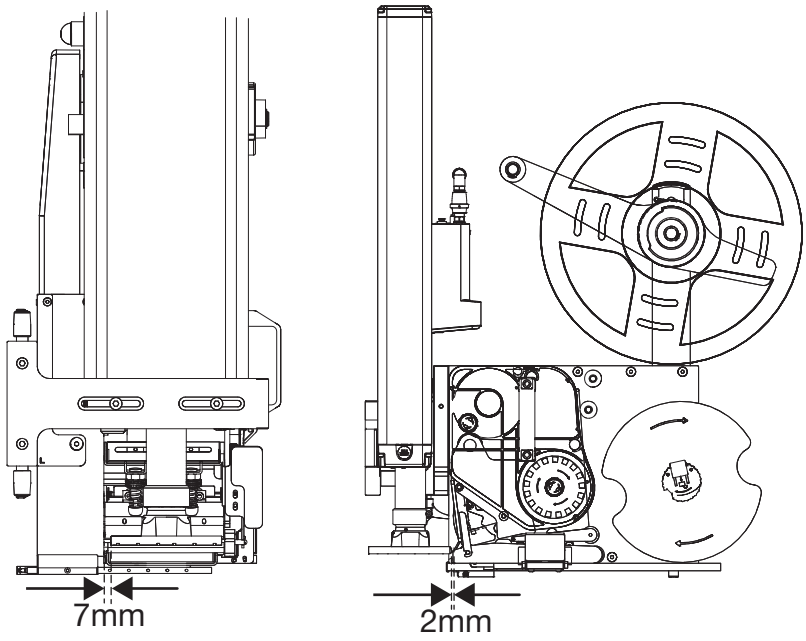
COMPRESSED AIR CONNECTION

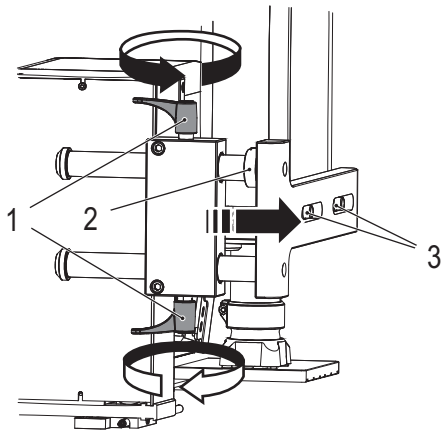
The Labeller requires clean compressed air supplied at a pressure of 6 bar.

The Labeller has an air regulator fitted as standard. However, it is still very important that the air pressure does not vary too much as this will often affect the accuracy when applying the label. Use a 10mm air tube.

ADJUST THE APPLICATOR

The Applicator may need position adjustments, depending on the chosen applicator pad size. Normally this is taken care of at the factory, but since the pads are exchangeable it can be done at any time. The main objective is to give a printed label a smooth path onto the applicator pad.





(1) Applicator holder levers

(2) Stop ring

(3) Screws

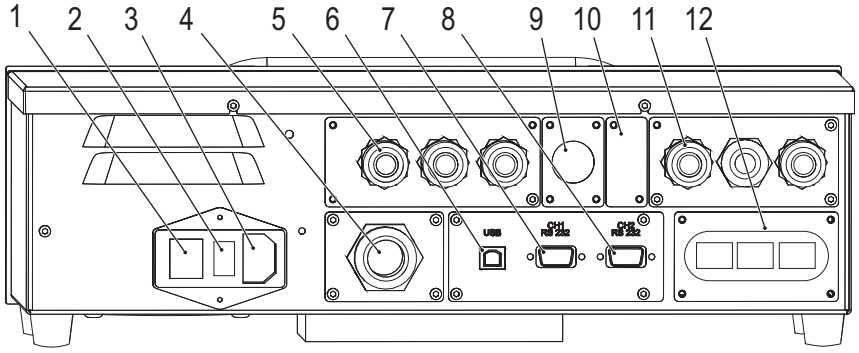
(1) The distance between the applicator pad side, closest to the printer and the printer frame should be 7mm. Loosen the two screws (3) and adjust the applicator's position. Tighten screws (3).

(2) The distance between the printer's dispensing beak and the front of the applicator pad, should be 2mm. Loosen the two holder levers (1) and adjust the applicator's position. In correct position, tighten the screw on the stop ring (2), this will guide the operator during service work to find the right position with ease. Tighten the holder levers (1).

ELECTRICAL AND COMMUNICATION CONNECTIONS

The electrical feed can vary between 110-240V.

External devices, such as PLCs, sensors and scanners etc are connected using the terminal blocks, see illustrations. The terminal blocks contain +24V and 0V to supply external product detectors, sensors etc.

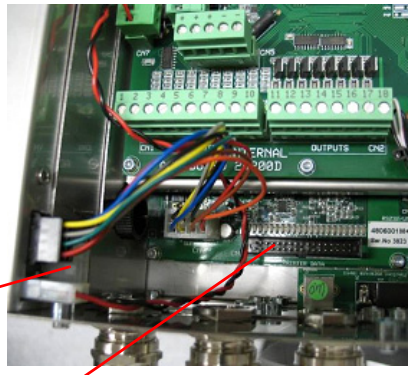


(1) Power On/Off switch
(2) Fuses Line & Neutral
(3) Mains plug
(4) Printer cable inlet
(5) Cable glands for sensors, etc.
(6) USB type 2.0
(7) CH1 - RS232
(8) CH2 - RS232
(9) Applicator cable inlet
(10) Beacon cable inlet
(11) Sensor, PLC inputs/output etc.
(12) Ethernet (WLAN optional)

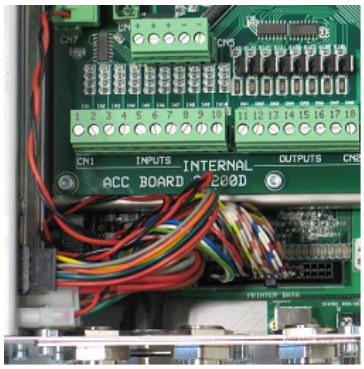
Printer cable

The printer cable is pre-connected to the printer at one end, the other end must be connected to the PCU. Mount the printer cable through the printer cable inlet in the rear of the PCU. Connect the printer cable to the PCU. Secure the mounting plate to the unit.

PCU



Printer cable installed



(1) Printer cable - Power connector

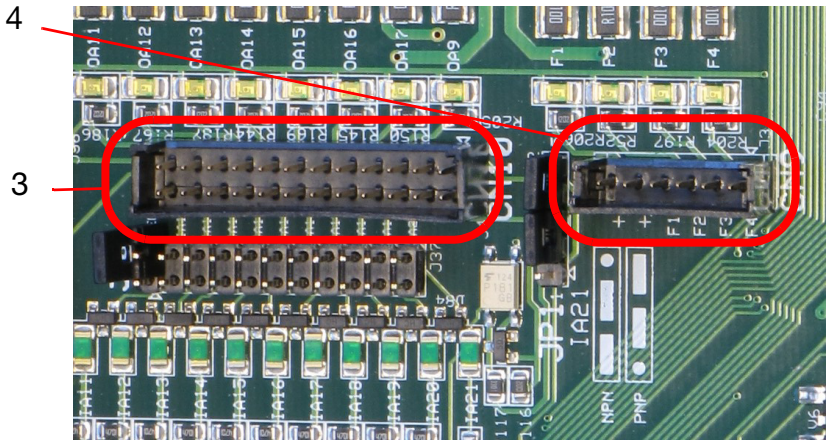
(2) Printer cable - Data connector

Applicator cable

The applicator cable is pre-connected to the applicator at one end, the other end must be connected to the PCU. Mount the applicator cable through the application cable inlet in the rear of the PCU. Connect the applicator cable to the ACC in the PCU. Secure the mounting plate to the unit.

Beacon cable (optional)

The beacon cable is installed to the beacon tower light (option). Mount the beacon cable through the beacon cable inlet. Connect the beacon cable to the ACC in the PCU. Secure the mounting plate to the unit.



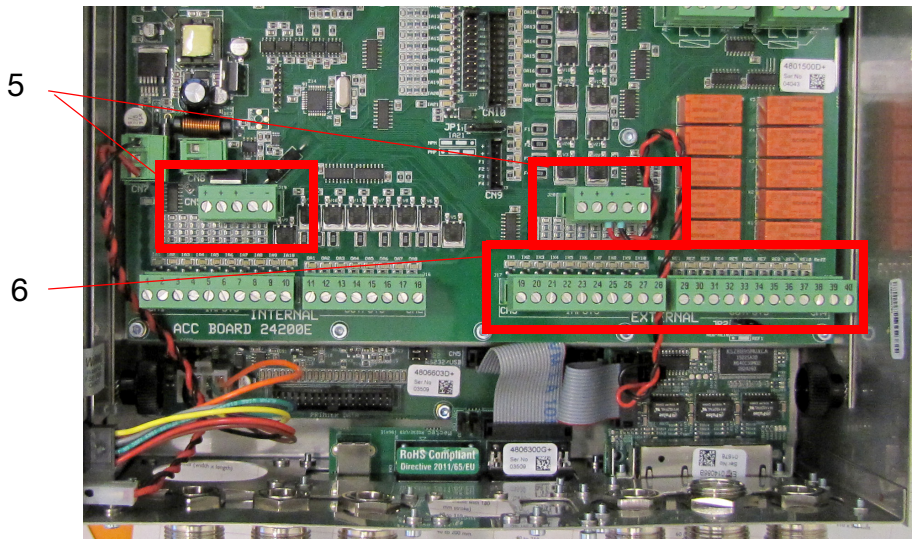
(3) Applicator cable connector - CN10

(4) Beacon cable connector - CN9

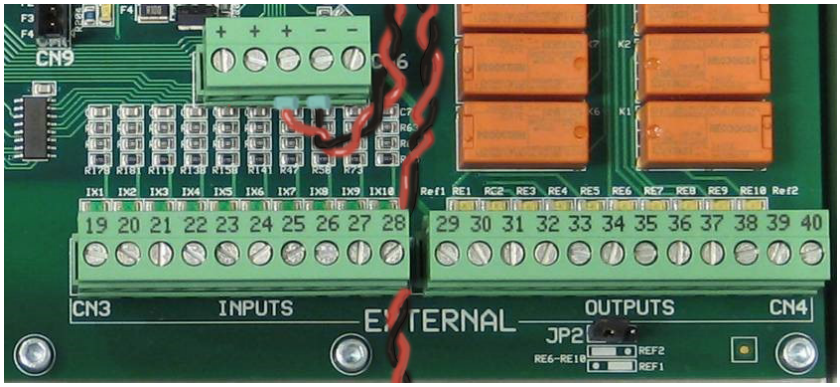
ACC terminal blocks for external connections

External devices such as PLCs, sensors and scanners, etc, are connected using the EXTERNAL terminal blocks.

CAUTION: Do not connect to the INTERNAL terminal blocks.



5. 24V & 0V are available to supply external equipment, like sensors.
6. External terminal blocks for customer connection.



Supply voltage - Terminal blocks CN5 & CN6

The terminal blocks CN5 and CN6 contain +24V and 0V to supply external product detectors, sensors etc.

External inputs - Terminal blocks CN3

The CN3 terminal block provides input connections for product detectors, sensors etc.

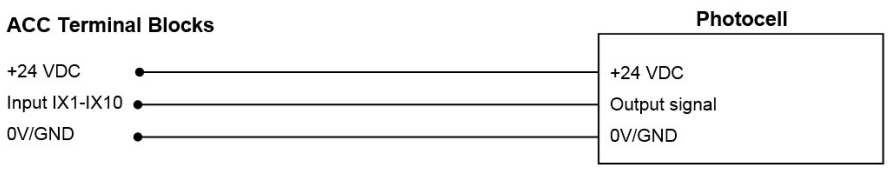
Table 1:

Pin	Input	Function	Comments
19	IX1	Print label	Standard print input (Photo sensor or similar)
29	IX2	Reprint label	
21	IX3	Apply 1	Standard apply input (Photo sensor or similar)
22	IX4	Apply 2	The configuration of the user defined inputs is made in the Setup program or on the PCU front panel. A configuration, based on the applicator used and information from customer, is in most cases already done at delivery.
23	IX5	User defined	
24	IX6	User defined	
25	IX7	User defined	
26	IX8	User defined	
28	IX9	User defined	
28	IX10	User defined	

Note: All Inputs are configurable. Standard as above.

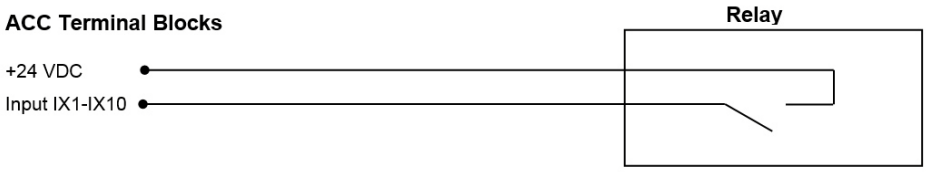
Connect sensors to ACC inputs

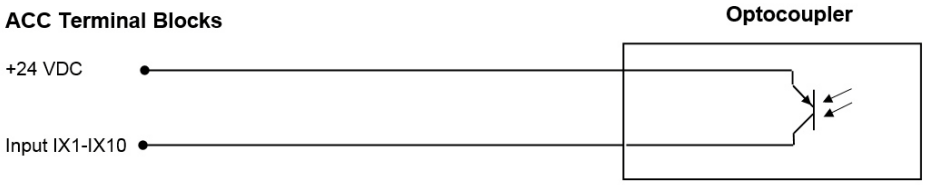
Note: All photo sensors must be PNP photocells.



Connect a relay or optocoupler to ACC inputs

CAUTION: Do not connect the internal voltage to an external source. It is strictly prohibited to connect the internal ACC 0V DC to an external 0V DC (e, g. the 0V DC in a PLC).





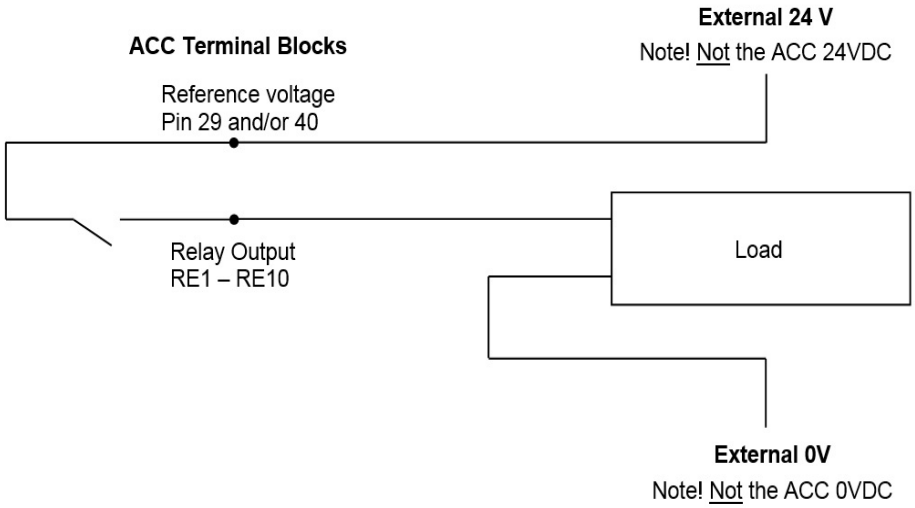
External output - Terminal block CN4

The default settings for output RE1-RE7 are configured as below, but can be amended in the setup program.

Pin	Output	Function	Comments
29		Reference Voltage 1	See further down for more information
30	RE1	Printer ready	
31	RE2	Data ready	
32	RE3	Applicator in home position	
33	RE4	Cycle completed	
34	RE5	Summary warning	
35	RE6	Applicator error	
36	RE7	Printer error	
37	RE8	User defined	The configuration of user defined outputs is done setup program or on the PCU front panel. Normally a configuration is already made at delivery.
38	RE9	User defined	
39	RE10	User defined	
40		Reference Voltage 2	See further down for more information

Note: All outputs are configurable but RE1-RE7 are configured as standard as above.

Connect an external load to the relay outputs (example)



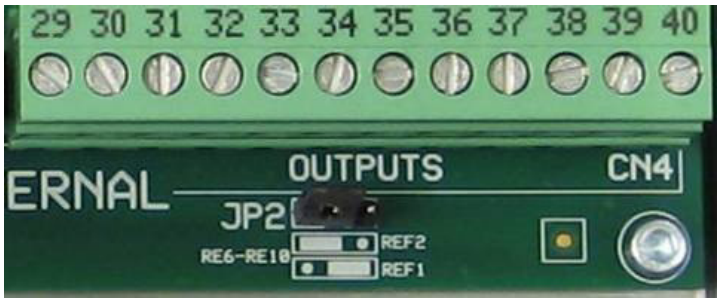
JP2 - Reference voltage jumper

REF1 = Jumper in right hand position

The same reference voltage (connected to pin 29 or pin 40) is used in all relays.

REF2 = Jumper in left hand position

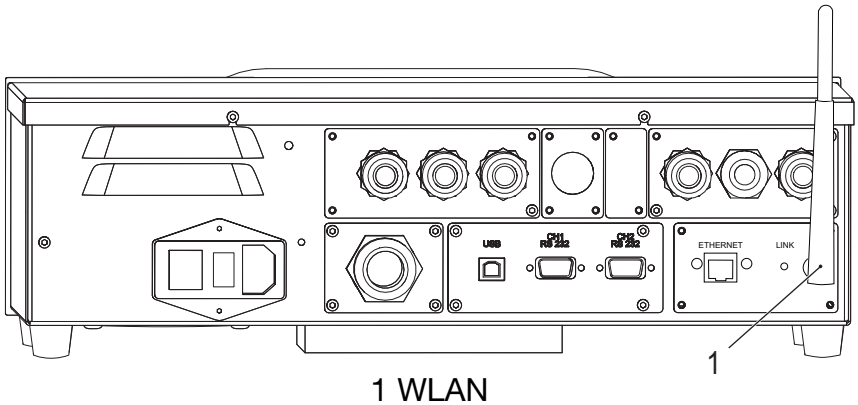
The reference voltage connected to pin 29 is used in relays RE1-RE5. The reference voltage connected to pin 40 is used in relays RE6-RE10.



OPTIONAL WLAN COMMUNICATION

The Labeller is equipped with a standard Ethernet (LAN) connection. However it is possible to replace this with an optional WLAN/LAN interface and replace the default LAN interface. (including an Ethernet cable connection)

Please see the part “Printer/Labeller & PCU/LCU” in the Technical manual for instructions how to configure WLAN/LAN interface.



1 WLAN

Optional WLAN/LAN interface

PART 5: OPERATING PROCEDURES

CONTENTS

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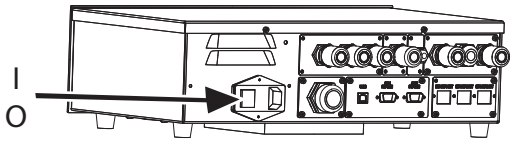
POWER ON/OFF

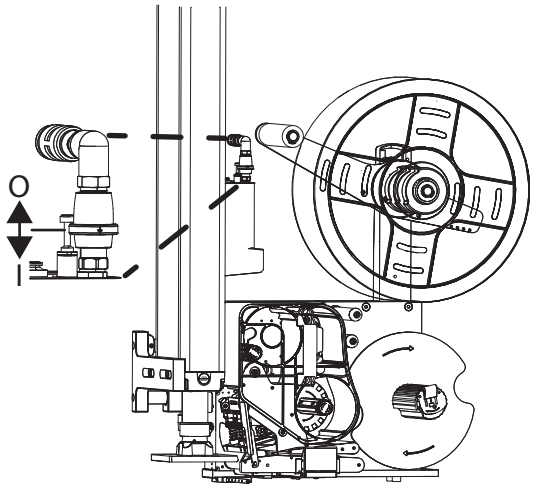
PCU

For maintenance purposes, or after the day's work, use the Power switch to turn the power ON/OFF on the machine. It is located at the rear of the PCU.



COMPRESSED AIR ON/OFF

For maintenance purposes, or after day's work, use the shut off valve at the top of the control module to de-pressurize the machine.



PRINTER - START / STOP / RE-START

The start signals can be made in different ways depending on how the setup is made.

The setup can be changed from the front panel on the PCU, or in the setup program at any time.

Start print

Start print can be done by:

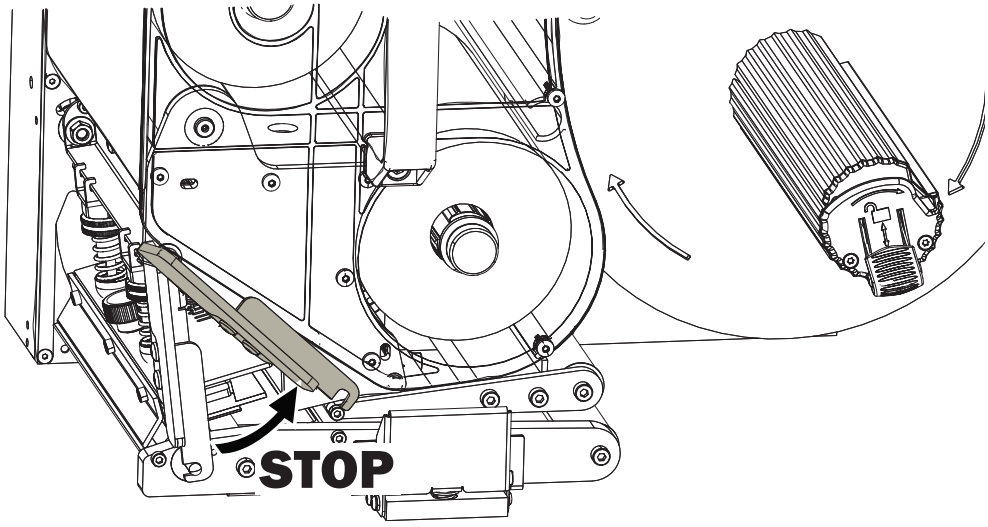
- Product detector, or other start signal, to the print input on the ACC board.
- Software.
- The print button on the front panel of the PCU.
- Home position sensor (“Auto print”).

Stop the printer

Open the print head to stop the printer. Use the handle at the side of the print head.

When the print head is up, no labels can be printed and the machine will not work.

The printer stops immediately when the print head is opened.



Re-start the printer

See the instruction for changing labels later in this chapter “Change Labels” on page 5-11.

APPLICATOR - START / STOP / RE-START

Start apply

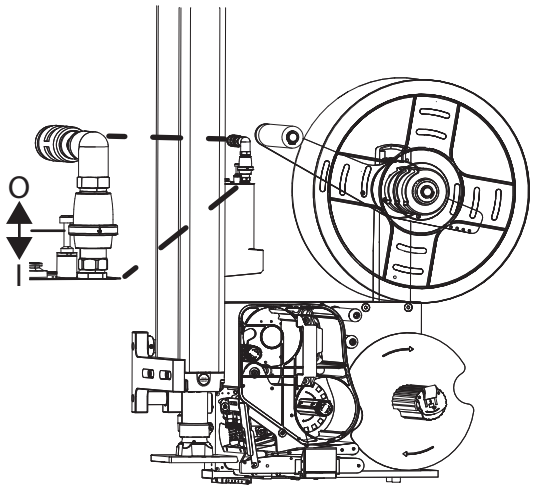
A label must be printed or fed before the Applicator can start.

The start signal to the Applicator can be made by:

- Product detector, or other start signal, to the apply input on the ACC board
- Software
- Automatically when the label is printed.

Stop apply

The Applicator can be stopped by switching off the compressed air. Pull the shut off valve upwards. The Applicator stops immediately, and the system is de-pressurized.

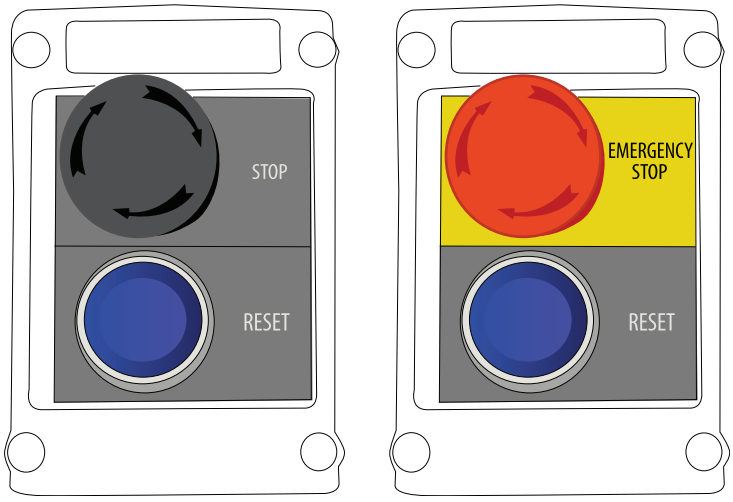


Re-start apply

Re-start the Applicator by switching on the air. Use the same shut off valve that is used to stop the Applicator.

MACHINE STOP / EMERGENCY STOP (OPTION)

As an option, the machine can be equipped with a Machine stop or Emergency stop which is an external stop function. The **Machine stop** stops only the labelling equipment. The **Emergency stop** stops the labelling equipment and a section of the production line.



Machine Stop *Emergency Stop*

The air is switched off immediately and the system is de-pressurized when:

- the BLACK button is pressed on the Machine Stop.
- the RED button is pressed on the Emergency Stop.

Reset Machine stop / Emergency stop (option)

To reset and restart the machine:

(1) Press the RESET button on the Machine stop / Emergency stop. The cylinders will slowly return to their home positions.

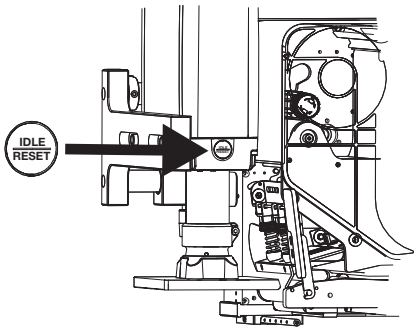
(2) The machine is now ready for operation.

STOP FOR SERVICE

Idle/Reset apply

The Applicator can be stopped manually for service purposes. Push IDLE/RESET button for setting the Applicator to Idle mode. It vents the compressed air system and enables the operator to move the cylinder by hand.

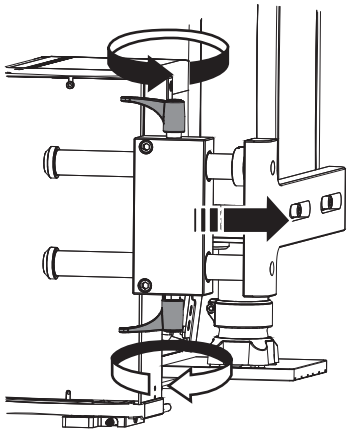
Press and hold the IDLE/RESET button to return to active mode. Air will then return to the compressed air system and the cylinder will return slowly to its home position.



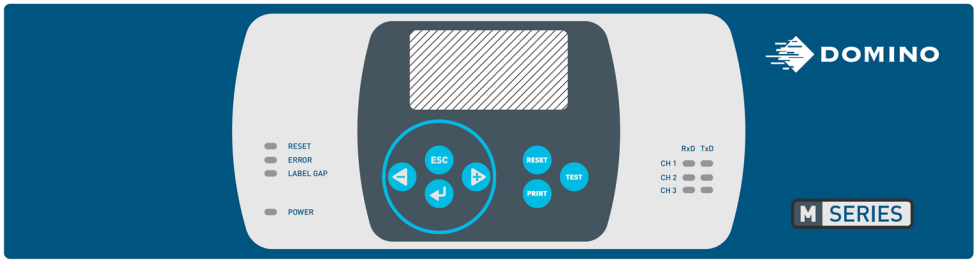
Access the printer

It is possible to move the Applicator to facilitate easy access of the printer. Turn the levers on the Applicator holder and push the Applicator aside.

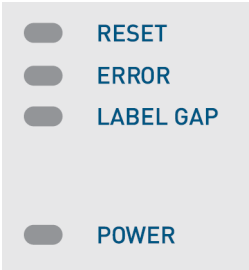
Note: Remember to reset the original position of the Applicator, after the completion of service.



PCU CONTROLS



	Enter Set-Up mode. Confirm values when changed.
	Exit a menu without saving (when used instead of Enter). Go backwards one step in the menu system for each press.
	Go to Previous/Next menu or item. The buttons also change the displayed value. Confirm change with Enter key.
	Re-starts the print and apply unit. See the Technical Manual: Advanced maintenance and Troubleshooting for more information. A Position Label sequence will take place (blank labels fed), if the *Reset/Power on* is selected in the Position Label configuration. See the Setup program for more information.
	The TEST button prints a grey pattern test label. It is used for maintenance and Print head performance tests. If the test button is pressed longer, it is the chosen label that is printed instead. The label's enumeration is not affected.
	The PRINT button is used to print a label. Depending on the configuration – it can print a new label, re-print the last printed label, or it can be set not to print.

	**RESET**: This LED indicates that RESET has been set, and that the system has been reset to start the process. **ERROR**: This LED indicates an error in the process (for example): No labels, No ribbon, Print head up, Print head overheated. **LABEL GAP**: This LED flashes to indicate the gap between labels. **POWER**: This LED lights green when all voltages are available.
	**CH 1 & CH 2** (RS232 port): RxD - Flashes when data is being received by the PCU. TxD - Flashes when the PCU is transmitting data to a PC or other computer. **CH 3** (RS485 port or Ethernet): RxD - Flashes when data is being received by the PCU. TxD - Flashes when the PCU is transmitting data to a PC or other computer.

Label selection from the Front panel

Label selection from the front panel is not password protected and a label stored in the printer memory can easily be selected by using the keys on the front panel.

Follow the steps below:

Step	Action	Display Shows
1	Enter the Menu system (level 1) by pressing the *Enter* key twice.	LABEL MENU Select labels
2	Press the *Enter* key and enter the label selection menu.	SELECT LABELS = xxx
xxx = The last used label or the last label in the list of labels that has been transmitted to the printer memory.		
3	Press the *Enter* key and start selection.	SELECT LABELS = xxx (flashing)
4	Use the – and + keys to scroll up and down in the label list.	
5	Press Enter to confirm selection.	LABEL MENU Select labels
6	Press Exit to leave the menu system.	PRINTER OK Ready

Make a print and the chosen label will be printed.

Note: A maximum of 500 labels can be selected from the front panel.

CHANGE LABELS

Load labels

(1) Open the print head with the lifting handle.

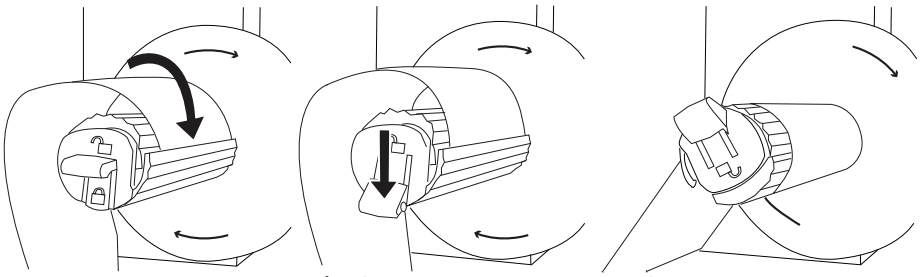
(2) Remove hood.

(3) Open the peel roller.

(4) Install a new roll of labels as shown in the threading diagrams, and insert the band of labels under the print head (Inside rolled or outside rolled labels).

Note: Study the threading diagram and ensure that the labels go the correct way over the 'dancing arm' on the reel holder. A correct path is important to get the right tension in the label web. There must always be suitable tension in the label web to prevent it from moving sideways on the platen roller.

(5) Drag the backing paper to the backing paper re-winder.



a. *Label in slot*

b. *Close*

c. *Ready*

(6) The backing paper re-winder has a locking mechanism for the backing paper. Put the backing paper into the slot and close it with the lever.

Note: Make sure that the slot is properly closed. If not, the re-winder will collapse and it will be difficult to remove the backing paper from the re-winder.

(7) Close the print head fully, put back the hood and close the peel roller.

(8) Position the label.

Label positioning

CAUTION: Label positioning must always be performed after changing labels or ribbons.

The label positioning procedure measures the label and stops it in a pre-set position on the dispensing beak.

The stop position is set by the head distance and the feed length. Both the head distance and the feed length can be adjusted in the Setup program or via the PCU front panel.

PCU

The positioning of the label can be executed in two ways depending on the setup.

- **Head close** (default & recommended method). Close the print head and press the *ENTER* button to feed and position the labels.
- **Reset/Power up.** Press the *RESET* button to feed and position the labels.

After label positioning, the printer/labeller will have measured the length of the labels and is ready for use.

Note: The labels must pass through the label gap sensor. Otherwise the printer assumes the label supply is exhausted and will not operate.

Remove the empty label roll

(1) Open the print head/pressure roller with the print head lifting handle

(2) Open the peel roller.

(3) Remove the empty label roll.

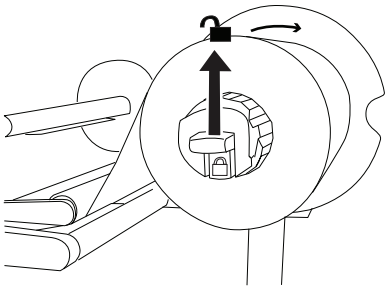
(4) Open the locking mechanism with the lever.

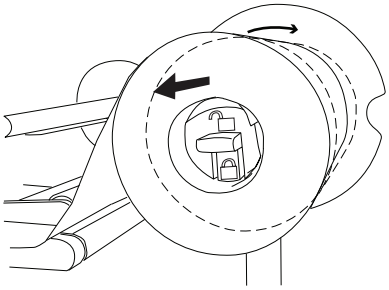
(5) Pull out the backing paper.

(6) Carefully clean the print head/ pressure roller.
(For details on print head cleaning, refer to PART 7 : Clean the print head.

(7) Gently blow any dust or debris away from the label-gap sensor.

(8) Install a new roll of labels. Follow the previous instructions.





Change ribbon

Notes:(1) Ensure that the correct outside ink type ribbon is used.

(2) Ensure that the ribbon re-wind is parallel to the unwind reel.

(3) Always take care to press the reels into place correctly.

Procedure

(1) Lift the print head with the lifting handle and gently ease the ribbon out sideways.

(2) Turn the knobs anti-clockwise to open. (See illustration below).

(3) Pull out and remove the exhausted ribbon roll and the roll with the used ribbon.

(4) Move the empty core from the exhausted ribbon roll to the ribbon take-up.

(5) Carefully clean the print head with cleaning wipes.

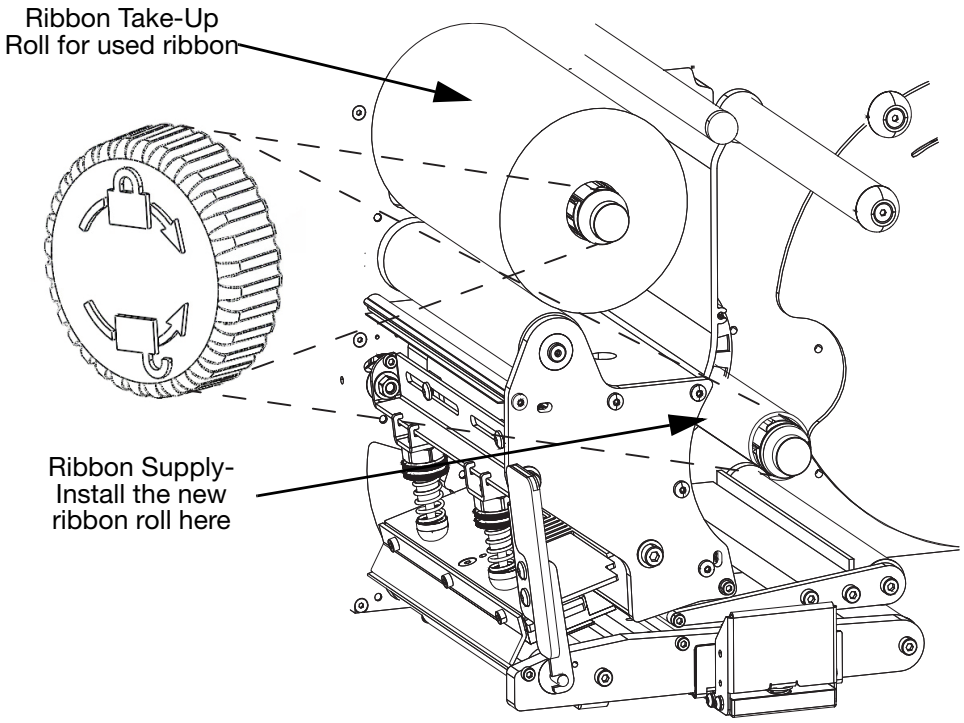
(6) Install a new roll of ribbon and thread it through the printer drive mechanism, as shown on the threading diagrams below.

(7) Do not pass the ribbon through the label-gap sensor, as the printer will fail to sense the label gap and will feed labels continuously until switched off.

(8) Turn the knobs clockwise to close. (See illustration below)

(9) Close the print head to the print position.

(10) To position the label correctly, the machine should feed and measure two to four labels.



Label positioning can be executed in two ways depending on the setup.

- **Head close** (default & recommended method). Close the print head and press the Enter button to feed and position the labels.
- **Reset/Power up**. Press the Reset button to feed and position the labels.

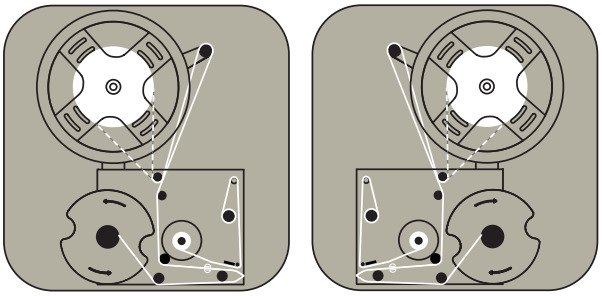
Ensure that these non-printed labels are automatically fed out.

After auto feed-out, the printer will have measured the length of the labels and is ready for use.

THREADING DIAGRAMS

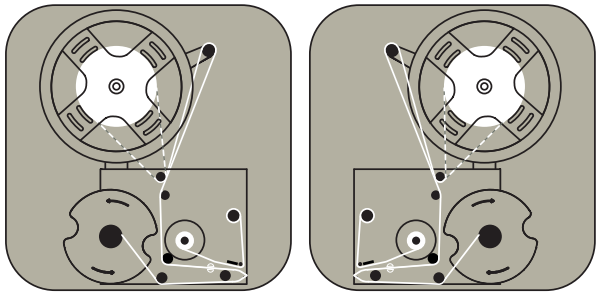
Labels on rolls

Labels and Ribbon T50i

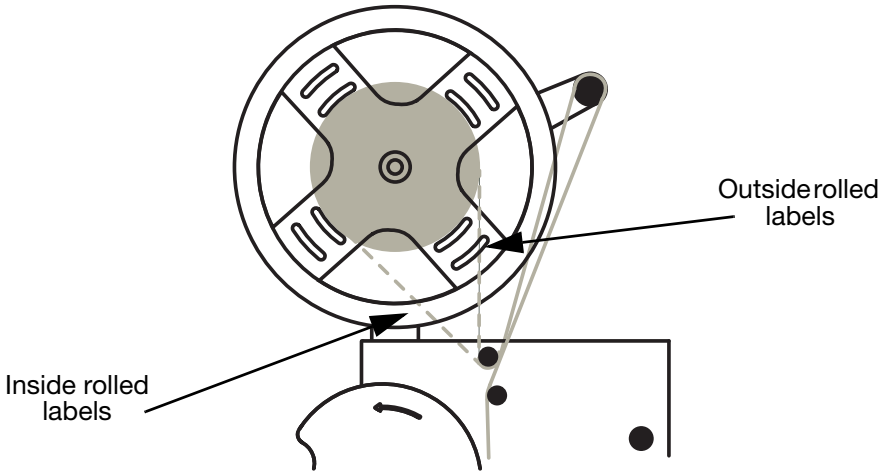


Left hand printer *Right hand printer*

Labels and Ribbon T60i



Left hand printer *Right hand printer*



Clarification

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PART 6: LABEL & RIBBON SELECTION

CONTENTS

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SELECTION OF MEDIA/LABELS

Domino recommends using media supplied by the company. Avoid thin or thick labels as they can be difficult to feed onto the applicator pad. Domino recommends that the gram weight of label stock should not be less than 55g/m^2 or more that 77g/m^2.

This correlates to the weight/thickness of plastic labels, but can vary depending upon the type of plastic material used.

Selection of appropriate (good quality) labels assists production and can reduce down time. Test any new label material in a printer prior to ordering the labels.

Print labels

It is possible to print on virtually any type of media/label material using a thermal transfer printer. It is simply a matter of selecting the correct label and combining it with the required ribbon quality.

Ensure that the labels have a top coating that is suitable (printable) with thermal printing.

Use only fitted thermal labels if using the printer as a Direct thermal Printer.

LABEL SELECTION OVERVIEW

	T50i	T60i
Maximum media width (Backing paper)	114mm	169mm
Maximum label width	111mm	166mm
Un-winder diameter	340mm	
Maximum roll length	600m	
Label roll – Maximum outer diameter	Approx. 340mm	
Label roll – Core diameter	75.5-77.3mm	
Label gap – Minimum length	3mm	

Label size

Note: Label sizes are expressed as Width x Length. The width is measured across the label and the length is measured in the print direction.

SELECTION OF RIBBON

Type of ribbon

The type of ribbon to be selected is dependent on the label material to be used, as it is possible to obtain a ribbon to suit virtually any type of label material.

Contact your supplier for advice on which type of ribbon to use for your particular application.

Back coating

The ink on the ribbon is important for print quality, the back coating is important to preserve the life of the print head.

CAUTIONS: *(1)* *A low quality ribbon often has a poor quality back coating that can leave too much residue on the print head. If the print head is not cleaned frequently, it will damage the print head.*

(2) *Do not use low quality ribbon in the printer as this will increase the maintenance costs.*

Ribbon selection overview

	T50i	T60i
Maximum length	600m	
Maximum width	115mm	170mm
Maximum outer diameter	90mm	
Recommended minimum width	60mm	
Core diameter	25 - 26.2mm	
Ribbon rolled	Ink-out	

Ribbon width

The required width of the ribbon depends on the width of the label used and the text printed on the label. If the whole width (or almost the whole width) of the label is printed then use a ribbon as wide as the label, plus 2mm on each side.

This allows equal pressure to be applied to the entire label avoiding any sticky glue residues.

Note: If only a part of the label is to be printed (in width) it is good practice to use a ribbon width suited to the print width. With a wide ribbon and only printing on half the ribbon width, their is a risk that the ribbon will be stretched only on the printed side, resulting in the wrinkling of the ribbon.

Minimum width

Because tension in the ribbon can be high, it is recommended to use a minimum width of 60mm.

If too narrow a ribbon (<60mm) is used, the tension could cause the ribbon to break.

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PART 7: BASIC MAINTENANCE & TROUBLESHOOTING

CONTENTS

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CLEANING AND MAINTENANCE SCHEDULE

FREQUENCY	DETAILS
DAILY or when changing media rolls (approx. 10 mins)	**CLEANING** Clean the exterior of the printer. Clean the print head. Clean the platen roller and ribbon take-up roller. Clean the applicator/applicator pad. Clean the platen roller. Clean the label-gap sensor.
	MAINTENANCE Check that the applicator pad is free from glue residues. Check the position of the applicator pad. Check the air pressure. Check the movement of the applicator.
WEEKLY (10 – 20 mins)	**CLEANING** Carry out DAILY cleaning.
	MAINTENANCE Carry out DAILY maintenance. Check the platen roller and ribbon take-up roller for damage or wear. Check the function of the machine stop (if used). Check the function of the applicator dampers.
MONTHLY (20 – 30 mins)	**CLEANING** Carry out DAILY.
	MAINTENANCE Carry out DAILY and WEEKLY maintenance. Check the function of the label-gap sensor Check the label stop position. Check the friction of the backing paper re-winder. Check the tension of the drive belts. Check the drive belts for wear. Check the print head for missing dots. Press the TEST push button to create a test pattern label. Check the shut off valve to the air supply. Check the alignment between the applicator and dispenser beak.
EVERY SIX MONTHS (60 – 90 mins) Only skilled personnel	**CLEANING** Carry out DAILY cleaning. Clean the PCU - Blow away any dust inside the PCU. Clean the vacuum ejectors. Tidy the printer and surrounding area.
	MAINTENANCE Carry out maintenance (see above), plus: Re-calibrate the label-gap sensor. Check the PCU fan operation. Check the operation of low media sensors (if fitted). Check the complete unit for loose or missing screws.

Note: The calibration, adjustment or changing of parts on the printer, PCU or Applicator must be done by skilled personnel.

GENERAL CLEANING

Clean the external casing of the machine with a lint-free cloth that has been immersed in warm soapy water and thoroughly squeezed out.

WARNINGS:
(1) The machine must be electrically isolated and the compressed air supply switched off during any cleaning operation.
(2) Lethal voltages are present. Do not pour water onto the machines or allow any liquids to penetrate the internal parts.

Clean the label-gap sensor

(1) Clean all paper dust and label parts from the label-gap sensor with a small brush or the plastic nozzle of a vacuum cleaner.

(2) Check that the label-gap sensor is parallel to the label.

(3) Perform a label positioning, see “Label positioning” on page 5-12

CAUTION: Be careful not to bend the sensor when cleaning it.

Clean the platen roller

Clean the platen roller with the cleaning wipes provided for the printer.

(1) Switch off the electrical and air supplies to the equipment.

(2) Raise the print head / pressure roller via the lifting handle and gently ease out the labels sideways.

(3) Rub the cleaning wipes along the platen roller and slowly turn the roller by hand until the platen roller is completely clean.

Note: The power to the printer must be switched off before it is possible to manually turn the platen roller.

Clean the ribbon take-up roller

Repeat the procedure as described for the platen roller but remove the ribbon instead of the labels.

Clean the Applicator

WARNING: Crush hazard! Switch off the compressed air before doing any service or maintenance on the Applicator. Follow all safety precautions relating to the use of compressed air.

Note: Clean the Applicator with the cleaning wipes.

It is very important that all dirt, debris and glue residues are completely removed from the applicator pad in order that labels may be fed onto the pad without obstructions. Use “Label off” spray or similar spray for this. Label check sensor, suction and blow holes (if applicable) can be easily cleaned using compressed air. Clean the applicator tube.

Clean the print head

CAUTIONS:

(1) Take care when handling or cleaning the print head.

(2) Remove any jewellery that may scratch the print head.

(3) The use of a grounding strap or anti-static mat to discharge static electricity that could damage the print head is recommended.

(4) NEVER use any hard, metallic or abrasive objects, such as a screwdriver to remove, adhesives or other contaminants that may have built up on the print head, as this will cause damage.

(5) Only use the cleaning wipes provided for the printer.

For optimum performance, clean the print head regularly after every roll of thermal transfer ribbon.

(1) Turn off the printer and raise the print head.

(2) Lightly blow or brush away any loose dust and lint particles within the print mechanism (i.e. rollers, media/ribbon sensors, and print head).

(3) Use the cleaning wipes to wipe the print elements from end to end.

How to avoid premature print head failure

Abrasion

Over time, the movement of labels or ribbon across the print head can wear through the protective ceramic coating, exposing and eventually damaging the print elements (dots).

To avoid abrasion: Clean the print head frequently and use well-lubricated thermal transfer ribbons with back-coatings optimized to reduce friction.

Ribbon back-coating and build-up

Print head contamination from thermal transfer ribbon may occur in applications requiring high burn settings, high print head pressure, high speed or high volume.

This contamination will build up on the print head elements, creating a barrier to the heat transfer required to produce high quality images.

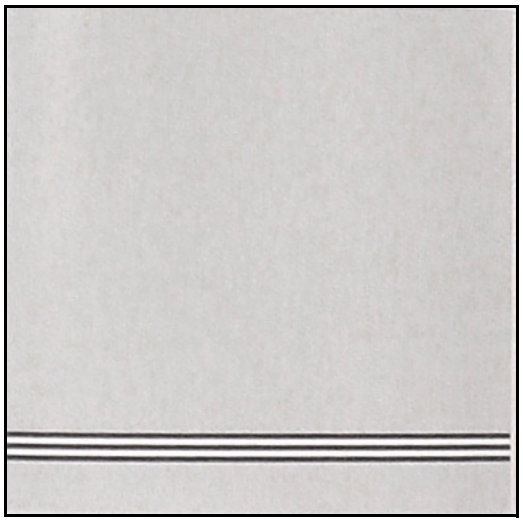
Contaminant build-up occurs gradually and results in poor print quality that may look like faded print or failed print element(s). This build-up is very resistant to cleaning with the maintenance wipes and is difficult to remove.

In order to avoid ribbon back-coating and build-up:

- Use thermal transfer ribbons that have been specially cured to provide back-coat protection for high demand applications. These ribbons, sometimes referred to as anti-stick ribbons, also dissipate static and provide more lubrication.
- Follow the recommended print head cleaning procedures.

PRINT A TEST LABEL

Printing a test label performs a test of the printer hardware. If a satisfactory test label is printed, you can be sure that the printer hardware is working (the printer communication will not be tested). Assist blow, Vacuum and Applicator are not activated.



The TEST button is located on the front of the PCU. Press the TEST button to print a test label.

The test label will provide a significant amount of information about the print quality.

The test label should have an even grey appearance.

If the even grey appearance is not apparent, use the table below to diagnose possible causes.

Test Print Result	Possible Reasons
White stripes in the print direction	The print head need cleaning. The print head has faulty dot.
White, uneven diagonal stripes	Wrinkles in the ribbon
Pale print	Print head is worn
White spots on the label	Dust on the label or ribbon. Unevenness in the label. Missing ink on the ribbon. Dirty drive roller.
Dark lines, or waves with random distance, across the test label	Uneven feed of the label or ribbon, may be caused by a slipping label. Slipping can be due to uneven or too tightly adjusted friction clutches
Dark lines, with always the same distance, across the test label	A drive belt, a pulley or a drive roller (platen roller) is damaged

BASIC TROUBLESHOOTING

Printers

Printer fails to print:

POSSIBLE CAUSE	Action
The power / air supplies are not switched on	Check the power switches and air valves
The labels and ribbon are not correctly threaded	Check the label and ribbon are mounted correctly
The applicator is not in the Home Position	• Check the position of the home position sensor • Check the air supply • Check for mechanical problems
A fuse has blown (Mains inlet)	Replace the fuse (Back side of the PCU)
The cables are not correctly connected	• Check for loose cables • Check wiring diagram
Machine Stop is activated Input IA1 (in the connection block CN1) must be active for a new print to be allowed	• Reset the Stop, if mounted • Check input IA1, make active if no Stop is mounted
Any error messages in the display?	Check the error list in Technical Manual: Advanced maintenance & trouble shooting
The print head is not in correct position	Make sure that the print head is mounted correctly

Note: Calibration, adjustment or changing of parts on the printer, PCU or applicator must be done by skilled personnel.

Labels do not stop at the correct position:

POSSIBLE CAUSE	Action
Labels are slipping on the platen roller	Clean all rollers thoroughly
Label-gap sensor requires calibration	Calibrate sensor and labels
The peel roller is worn or damaged	Replace or repair
The platen roller is worn	Replace platen roller
Drive belts are worn or damaged	Replace drive belts
A pulley is damaged or loose	Replace or repair
The peel roller is not mounted correctly	Adjust the position of the peel roller
Backfeed is used and the label change direction when the gap is in the label-gap sensor. Could happen when the label is approx. 55mm long and the backfeed is set to approx. 19mm	Move the label-gap sensor in the print/feed direction

Poor print quality

POSSIBLE FAULT	Action
The print head is dirty	Clean the print head, use the cleaning wipes for the printer
The platen roller is damaged or dirty	Replace or clean the platen roller, use the cleaning wipes for the printer
Incorrect label and ribbon material	Check the label and ribbon material. Get information from supplier. See “LABEL SELECTION OVERVIEW 6-3” on page 6-1.

Note: Calibration, adjustment or changing of parts on the printer, PCU or applicator must be done by skilled personnel.

The ribbon wrinkles

POSSIBLE FAULT	Action
The ribbon is incorrectly threaded	Check the threading diagram
Too low friction on the ribbon supply spool	Adjust the friction clutch
The ribbon guide is not parallel with the ribbon	Adjust the position of the ribbon guide
Too wide ribbon compared to the printed area	Change to another ribbon width
The print head is misaligned	Contact service personnel

The ribbon rewind does not operate correctly

POSSIBLE FAULT	Action
The ribbon is incorrectly threaded	Check the threading diagram
Insufficient spring tension for the ribbon take-up	Adjust the pressure on the ribbon take-up roller
The ribbon is dirty	Clean the roller thoroughly

Note: Calibration, adjustment or changing of parts on the printer, PCU or applicator must be done by skilled personnel.

Applicator

Labels do not apply in the correct position:

POSSIBLE CAUSE	Action
The applicator is not aligned or out of its width or length position	Adjust the alignment between the printer and the applicator pad. See “Adjust the Applicator” on page 4-5 or exchange applicator if it is damaged.
The applicator pad is turned or loose	The pad adapter is damaged. Contact service personnel.

Note: Calibration, adjustment or changing of parts on the printer, PCU or applicator must be done by skilled personnel.