

## MODE OF USE F3500

For the carousel normal use, carefully read the “**Warnings for use**”, then place the carousel near the injection press, checking that the printed components fall into the boxes and taking care that they are not damaged or fall out of the boxes. Then place the boxes in the appropriate seats on the carousel platform. Lock the wheels, program the work cycle as described on the following pages. Then start production.

### GENERAL DESCRIPTION

The device is used to fill a series of boxes that are placed on the carousel. The components, which usually come from a conveyor belt or other types of machines, are dropped into the boxes. Using the user interface device, it is possible to set the operating parameters and logic. By contacting Crizaf technical department, electrical diagrams, technical drawings, etc. can be requested.

### OPERATING PARAMETER SETTING

#### MENU

Press the following buttons to browse the menu.



By pressing this button, it is possible to return to the main page.



By pressing this button, it is possible to return to the previous page.



By pressing this button, it is possible to view the next page.

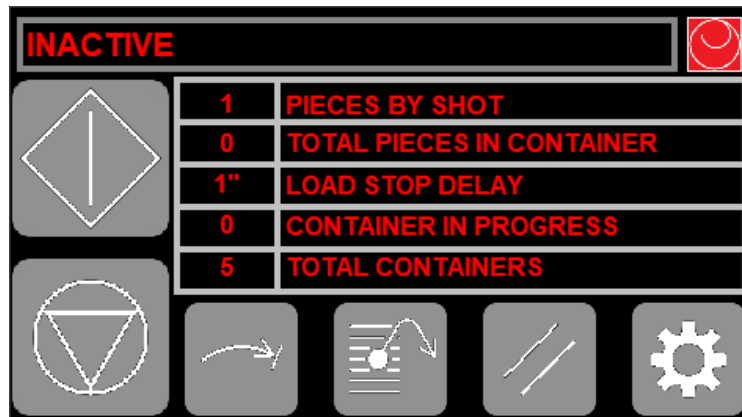


By pressing this button, it is possible to open the “Settings” menu (only on the main page).



Position reset. If enabled, the machine will return to the zero position. If not enabled, the machine reaches the next cam and resets the current position (manual repositioning).

**NOTE:** it is not possible to view the options while a programme is active. Press “Options” to view the number of components in the box.



By pressing this button the work cycle starts. The work cycle only starts if all the parameters have been correctly set.



By pressing this button the work cycle stops and resets.



By pressing this button it is possible to force progress to the next box during the filling phase.



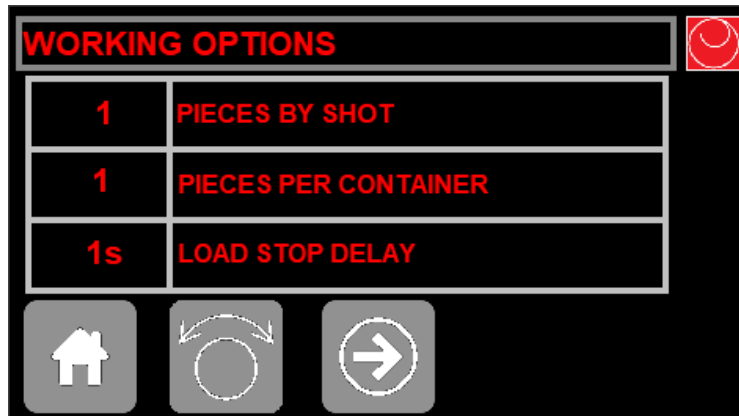
By pressing this button a component will be subtracted for sampling.



By pressing this button, the alarm is silenced and the machine enters stand-by mode. If pressed for a long time (around 5 seconds), all work parameters and machine modes are reset.




By pressing this button when the machine is not working, the work parameters can be changed; if pressed during the work cycle, it is possible to view the set parameters instead of the current ones.

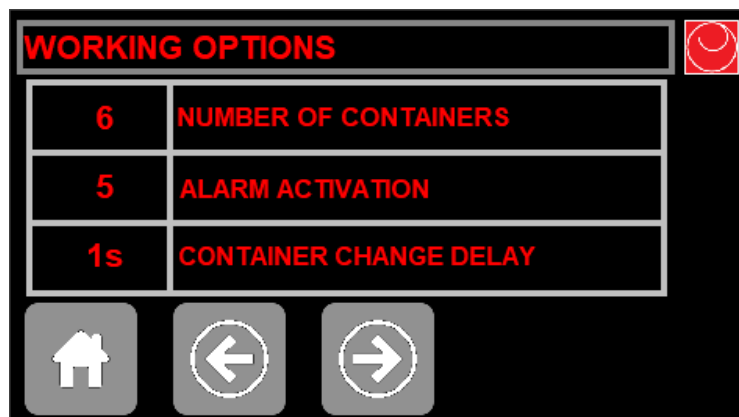


By pressing the button  in the main page, it is possible to view this page.

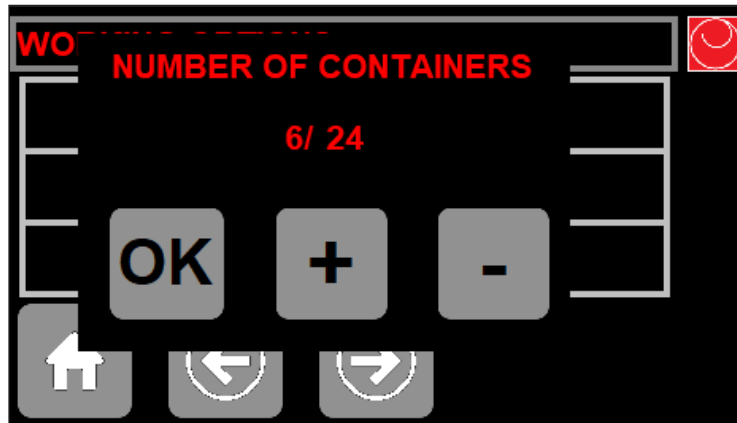
- **PIECES BY SHOT**: it indicates the number of components in each box after every shot.
- **TOTAL PIECES IN CONTAINER**: it indicates the number of components to be placed in each box (it must be a multiple of PIECES BY SHOT).
- **LOAD STOP DELAY**: it indicates the delay before the conveyor is stopped, starting from the last counted printed component, before changing the box.


Press  to view the next page.


Press  to advance the carousel by one cam/position.




- **NUMBER OF CONTAINERS**: it indicates the number of positions of the machine (e.g. a sub-multiple of 24).
- **ALARM ACTIVATION**: it indicates the position where the alarm will be activated. This value must be between 1 and the number of positions of the machine (0 disables the alarm). In case of multilevel configurations (chute function), all containers will be counted, not only those on one floor.
- **CONTAINER CHANGE DELAY**: it indicates the container change delay. It can be used for emptying the chute feeding the conveyor belt.



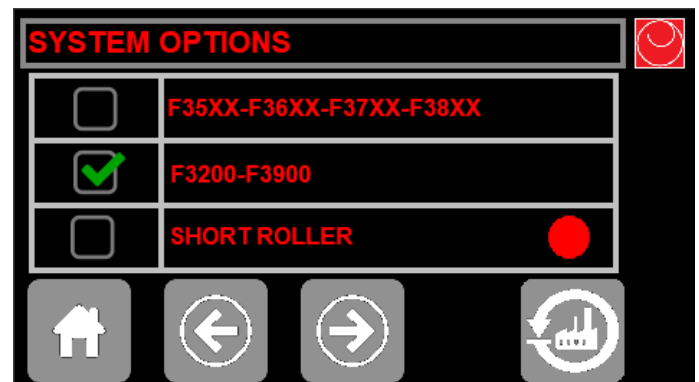
Press  to return to the main page.

Press  to return to the previous page.


Press  to view the system options.

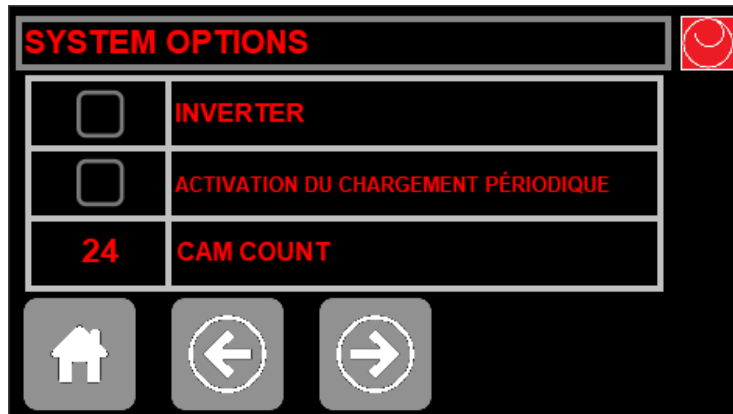
## SYSTEM OPTIONS

The following pages can only be viewed through a (modifiable) password. The default password is **12345**.

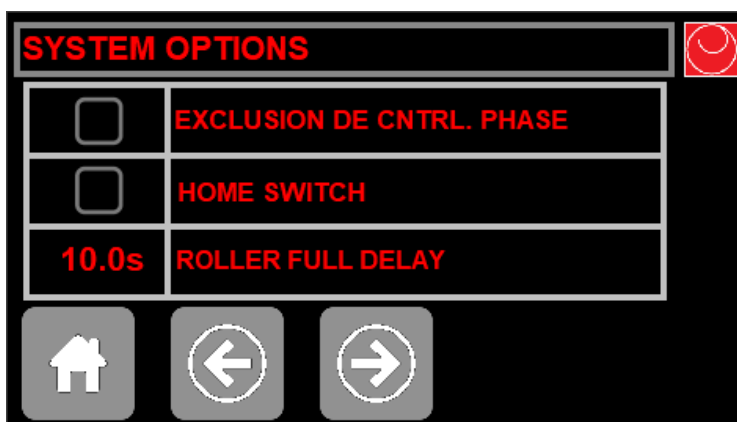


- **F35XX-F3600-F37XX- F38XX or F3200-F3900**: it allows to choose the carousel or belt work mode (each choice excludes the others).
- **CHUTE**: it allows to select the chute for the carousel second floor (this option can only be selected after having chosen F35XX-36XX- 37XX-38XX).
- **SHORT ROLLER**: it allows to select the short roller for a continuous and shortened cycle (this option can only be set after having selected F3200-F3900).

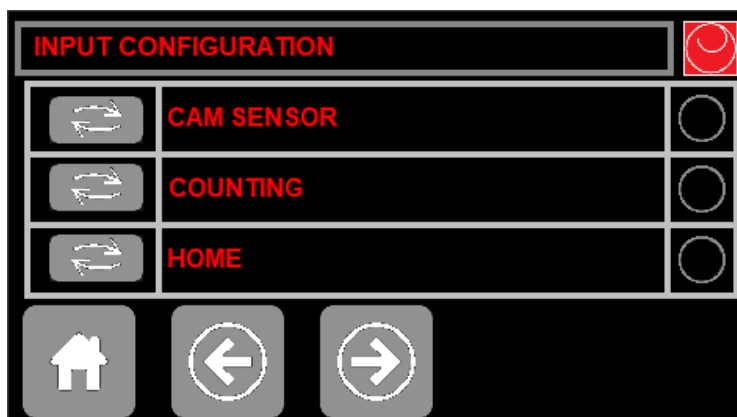
The button  resets the parameters to the factory default values. If pressed for some seconds until a red light appears, this button will reset the work parameters and the settings to the factory default values (except language and machine type). Switch the control off and on for the reset to be effective.



- **INVERTER:** it indicates that the inverter is active (the motor relay always remains enabled and the operation control is given by the “enable inverter” output).
- **TIMED LOAD ACTIVATION:** it allows to enable a load within a given time.
- **CAM COUNT:** it indicates the number of cams on the machine (max. 24).



- **PHASE CONTROL EXCLUSION:** it allows the phase control exclusion.
- **HOME SWITCH:** it enables the home switch.
- **FULL ROLLER DELAY:** it indicates the delay after which the device signals that the roller is full of boxes that need to be removed.

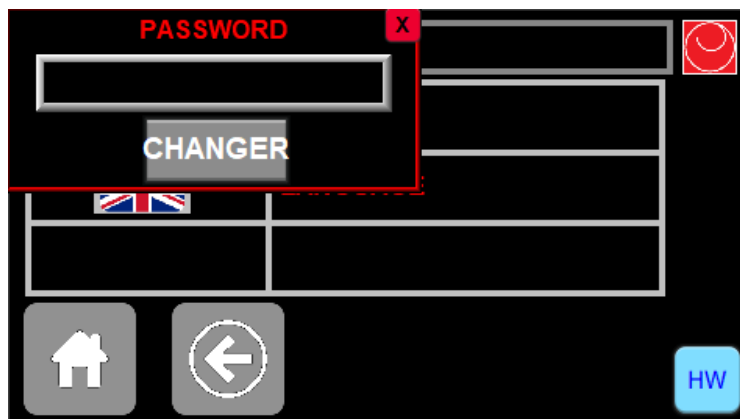


- **CAM SENSOR:** it indicates the type of sensor input (on= cam in position).
- **COUNTING:** it indicates the type of component counting (on = counting in progress).
- **HOME:** it indicates the type of zero sensor input (on = sensor in zero position).

switches the input from NO to NC and vice versa. The TEST column shows the input logic state.



- **PASSWORD (default 12345):** it allows to set the desired password. The password must be numerical and must be composed of at least 5 numbers.




- **LANGUAGE:** it allows to select the desired language (Italian, English, Spanish, French, German and Slovakian). Press the corresponding flag to set the desired language (see picture below).



## OPERATION

When the machine is switched on, 2 beeps and light signals will be emitted.

To set parameters or to start a work cycle, no errors must be shown on the display. Otherwise, the "INACTIVE" state must be reset by eliminating the causes of the error. Then reset the machine by pressing .

To set work parameters in the "INACTIVE" state, press the Options button .

Once all parameters have been set, start the work cycle by pressing the Start button .


At the start of the cycle, the conveyor belt will start to fill the container positioned on the carousel. The machine will wait for the piece counter input. When the set value is reached, a delay time will begin to count down. During this time, the pieces that were already on the belt at the time of the last shot will be conveyed into the box.

After the delay time, the belt stops and the container is changed. A new cycle will restart. When the sector set by the



operator is reached, the alarm will be activated. To silence/reset the alarm, press .

If the box of the last sector has been filled and the alarm has not been disabled, the machine will stop and go into the "INACTIVE" state; otherwise it will restart from the first sector.

In the automatic filling phase, press  to remove a component from the count.

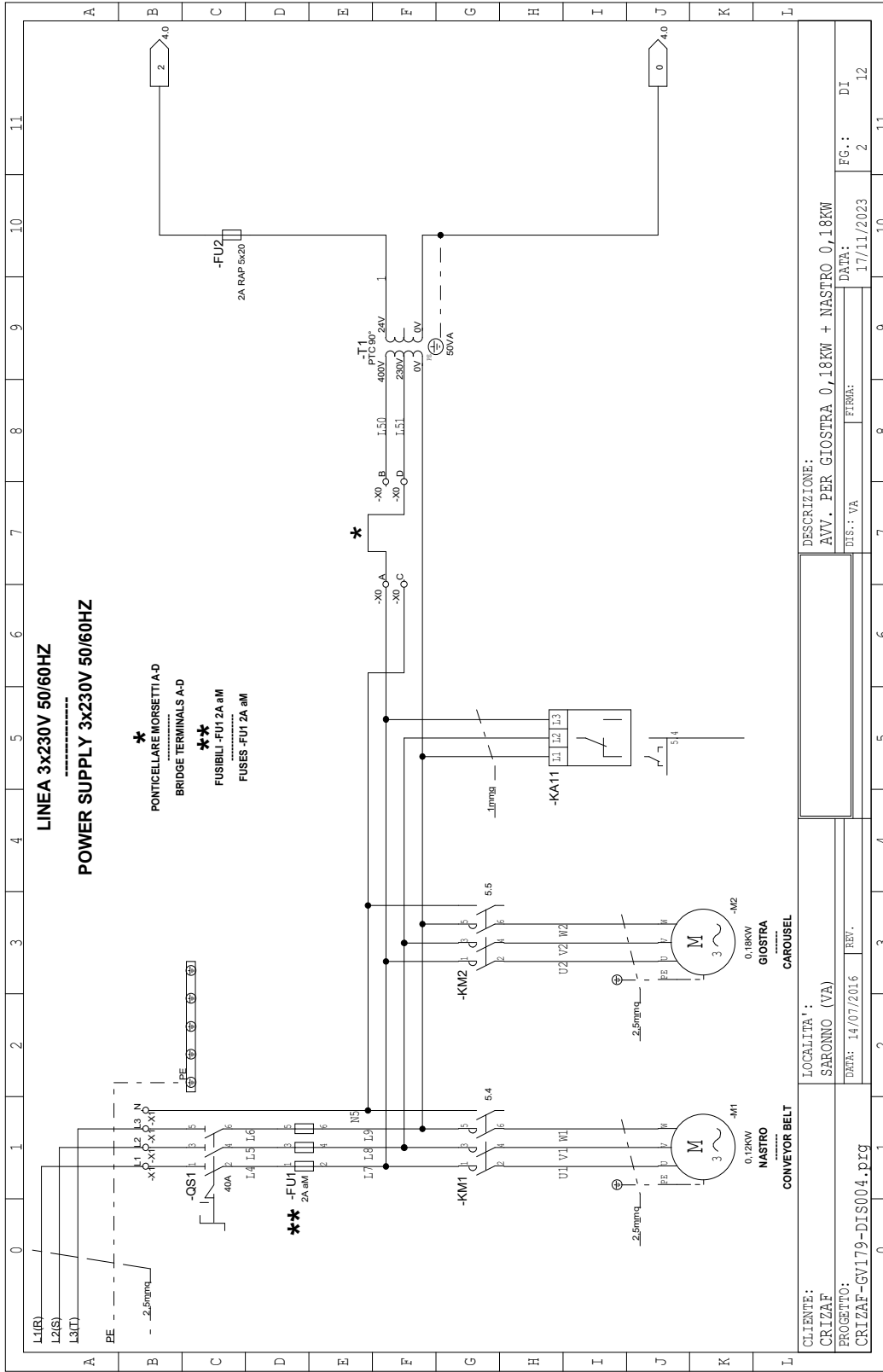
In the inactive state, the manual progress button  the carousel will advance one sector. If it is pressed in the last sector, the machine will reposition in the first sector without stopping. When the "CHUTE" option is enabled, after the box in the last sector has been filled, the machine will not stop but move the chute onto the other floor, repeating the whole cycle. The alarm will be moved onto the corresponding sector of the second cycle.

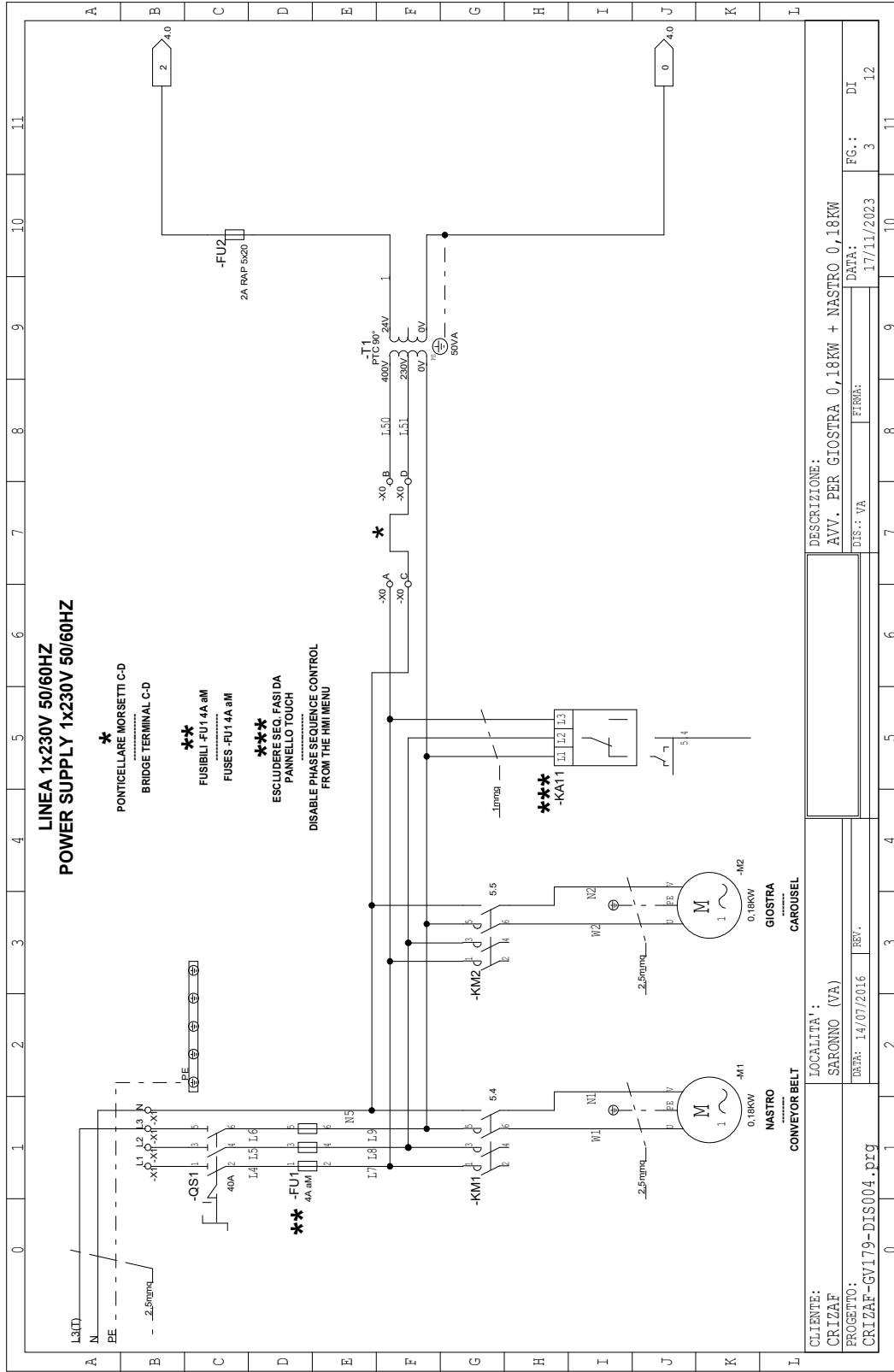
### NOTES:

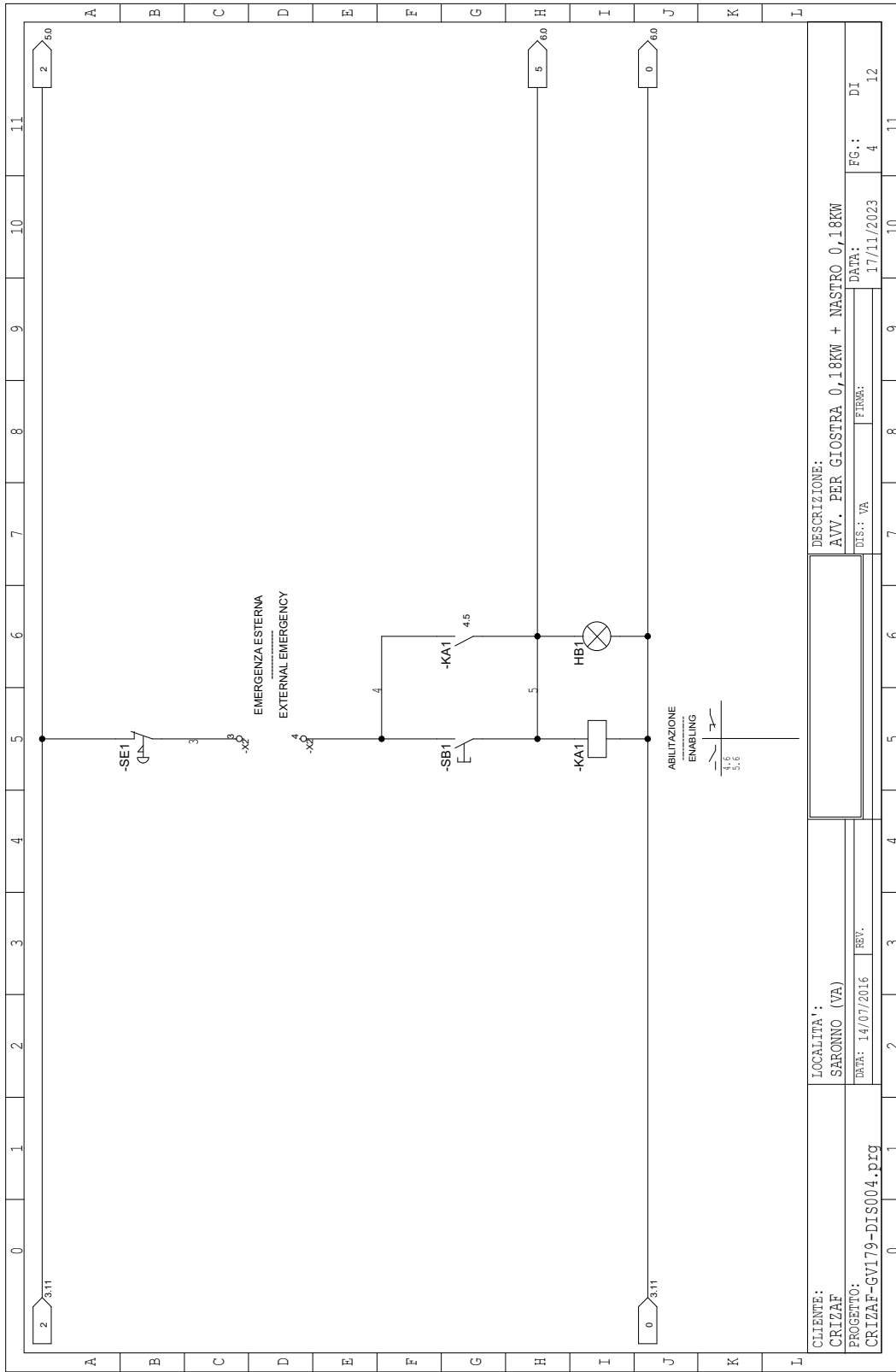
- During the cycle, press  to silence the alarm and prevent the machine from stopping when the cycle is completed (remember to unload the filled containers).
- To reset the number of filled boxes, hold down .
- If the STANDBY input (J3.6) is not active, the machine will not count the pieces. In the INACTIVE state the cycle cannot be activated.
- The count signal, if connected to the normal input, can be a maximum of 50 Hz, with an impulse duration of 1 ms; if connected to the aux count input, 5 Hz with an impulse duration greater than 50 ms and smaller than 150 ms.
- If no cam is detected within 5 seconds, the carousel will be stopped and the machine will indicate the stops of the carousel through a sound and light alarm.

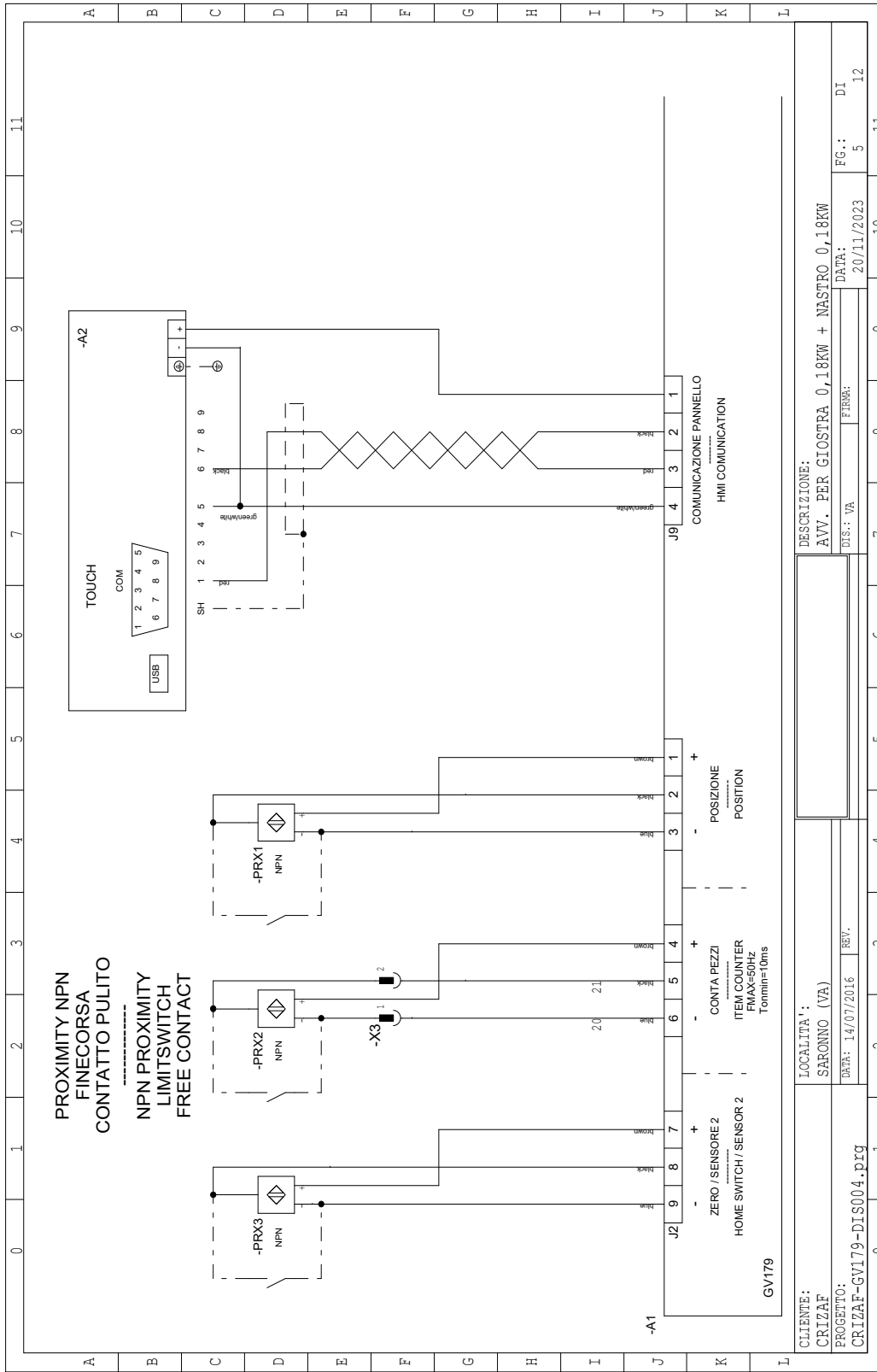
ERROR	DESCRIPTION	REASON
<b>Blocked advancement</b>	During carousel movement, the system did not detect the movement of the platform	<ul style="list-style-type: none"> <li>• Carousel jamming</li> <li>• Fault in the cam-limit switch system</li> <li>• Electric fault: faulty component or interrupted connection</li> </ul>
<b>Phase sequence error</b>	The phases are not in the correct order to ensure the platform correct rotation	<ul style="list-style-type: none"> <li>• Invert two phases on the X1 terminal block or on the plug connected to the power grid.</li> <li>• If single-phase power is used, exclude phase control in the System Options menu.</li> </ul>
<b>Emergency</b>	The system is in the emergency state	The mushroom head emergency push-button is pressed or there is no continuity between terminals X2.3 and X2.4. Press the ON push-button SB1 to re-enable the system.
<b>Pieces per shot error</b>	There is an error in the feeding of pieces per shot	Check that this number is not set to 0 in the Work Options.
<b>Err. pieces per container</b>	There is an error in the feeding of pieces per container	Check that this number is not set to 0 in the Work Options.
<b>Err. delay time</b>	There is an error in the delay time entered for the belt conveyor	Check that this number is not set to 0 in the Work Options.
<b>Section number error</b>	There is an error in the number of sectors/containers entered	Check that this number is not set to 0 in the Work Options.
<b>Interruption of the external signal</b>	No signal is received for the count	Power failure in the STAND-BY input (J3.6) of the board.

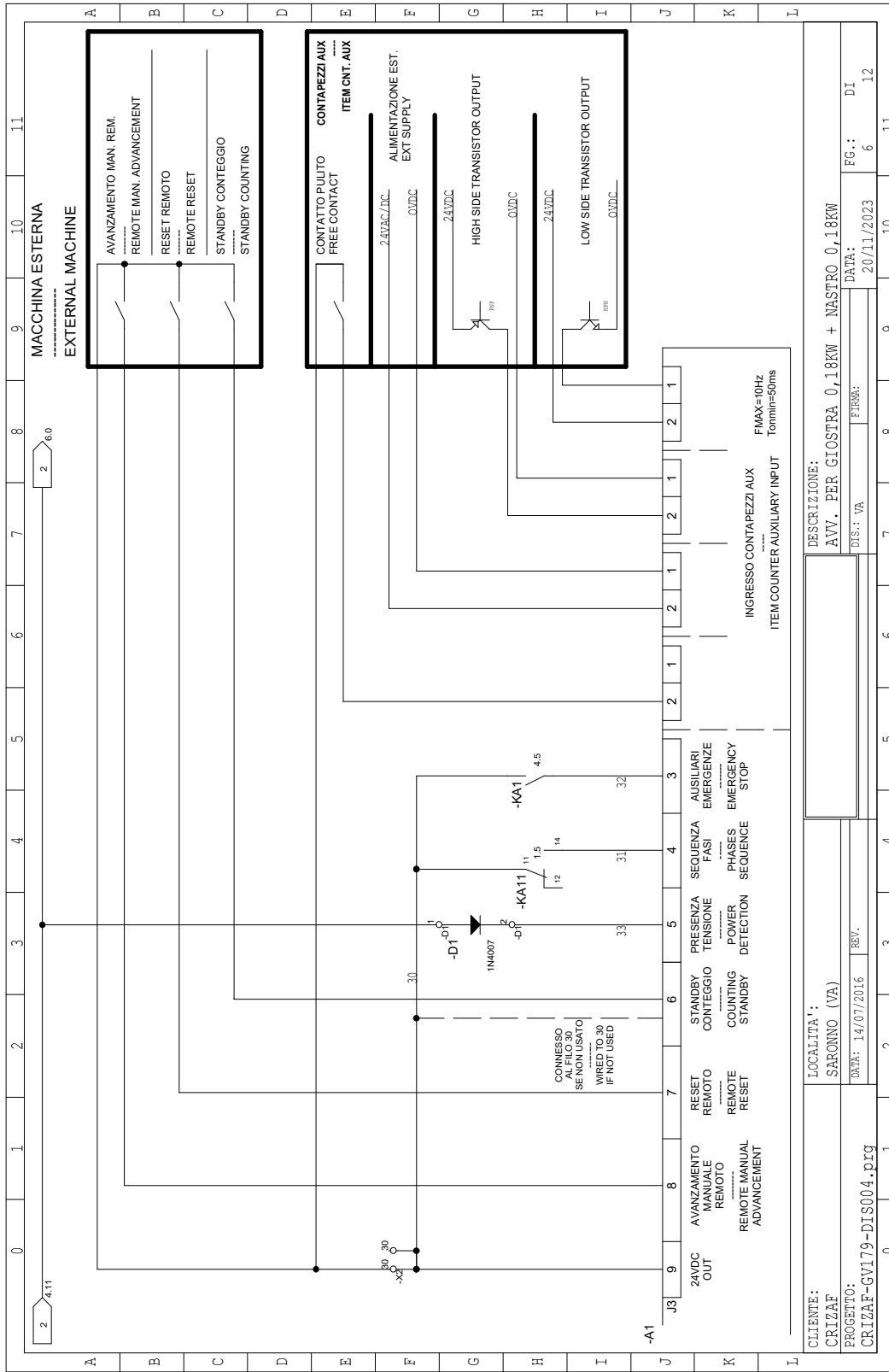




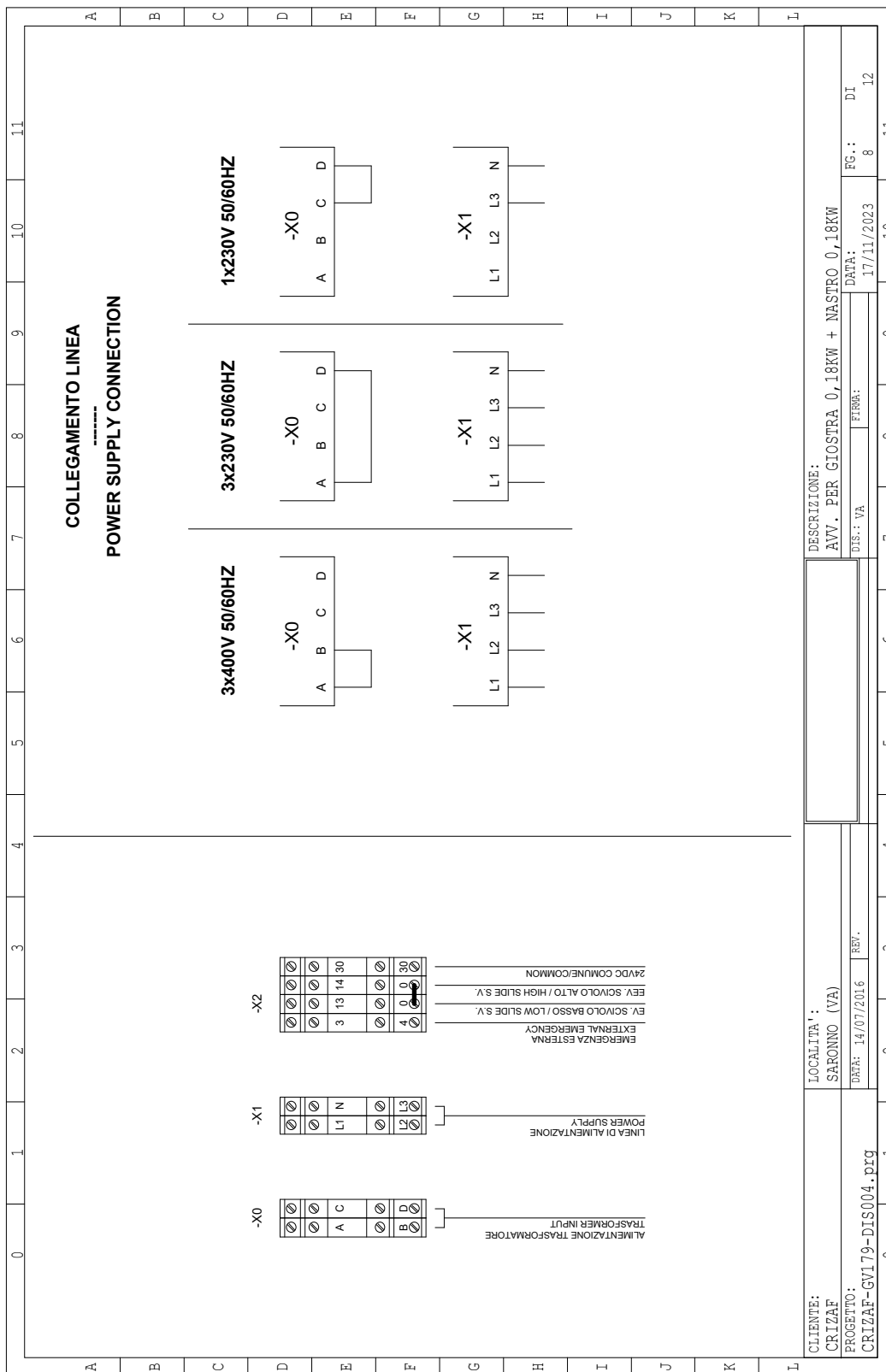


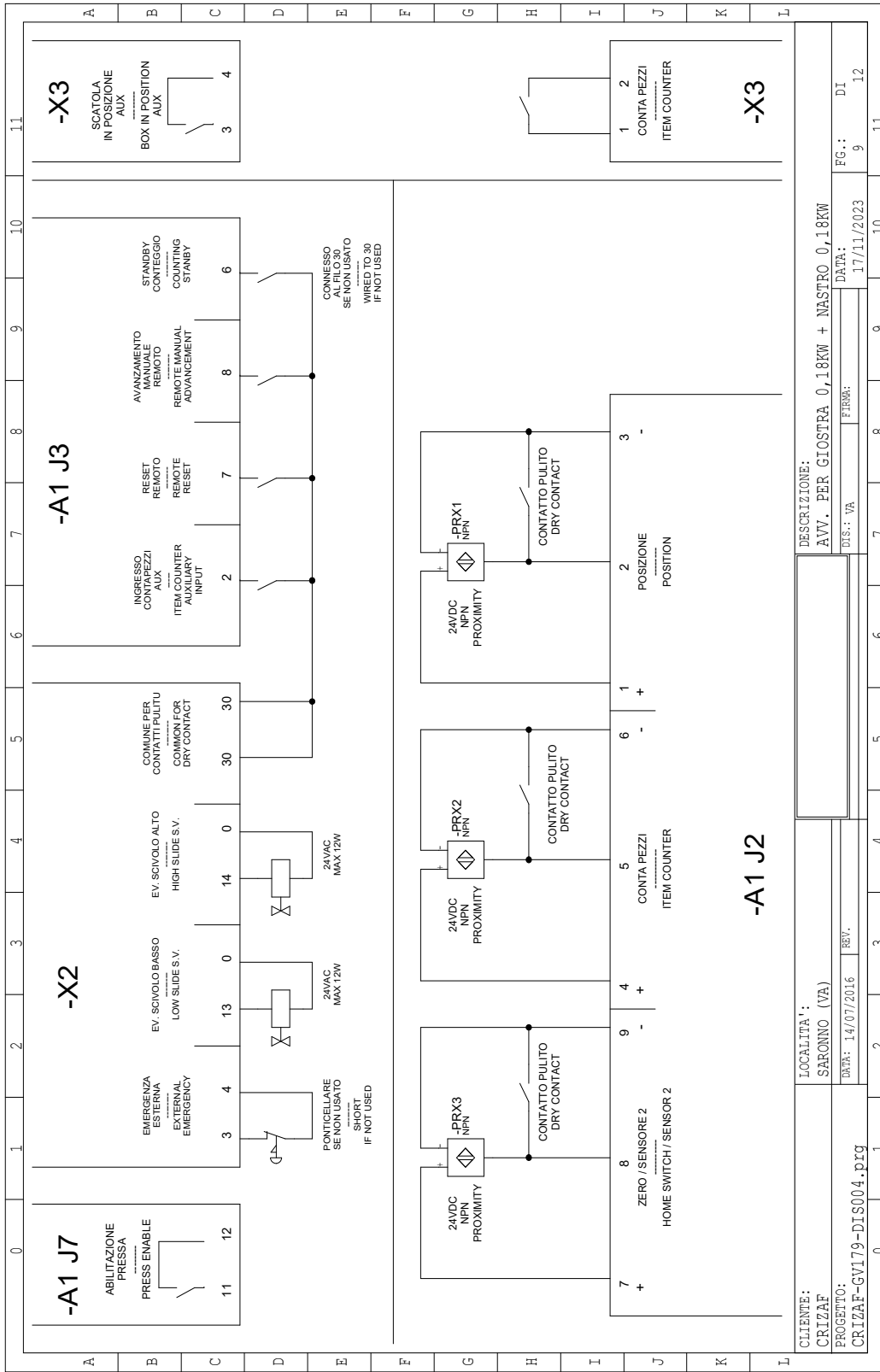




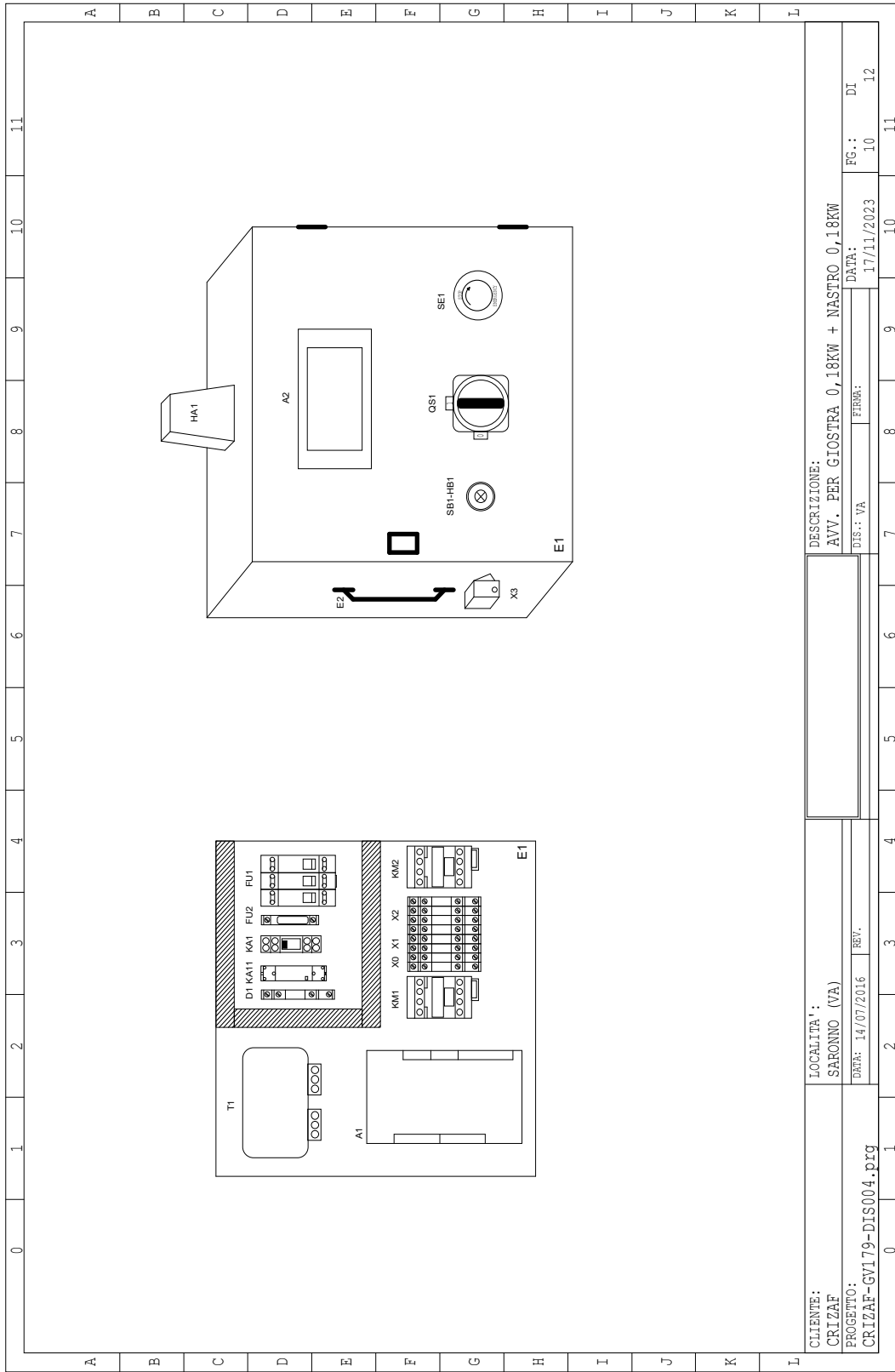








CLIENTE:	LOCALITA':	DESCRIZIONE:
CRIZAF	SARONNO (VA)	AVV. PER GIOSTRA 0,18KW + NASTRO 0,18KW
PROGETTO:	DATA: 14/07/2016	DIS.: VA
CRIZAF-GV179-DIS004.pig	REV.	FIRMA:
		DATA: 17/11/2023
		FG.: DI
		9 12



CLIENTE:	LOCALITÀ:	DESCRIZIONE:	FIG.:	DI
CRIZAF	SARONNO (VA)	AVV. PER GIOSTRA 0,18KW + NASTRO 0,18KW	10	12
PROGETTO:	DATA:	DIS.: VA	10	12
CRIZAF-GV179-DIS004.prg	14/07/2016	FIRMA:	17/11/2023	
	REV.			



0	1	2	3	4	5	6	7	8	9	10	11
CODE/CODICE	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIZIONE	BESCHREIBUNG	CONSTRUCTEUR/BUILDER CONSTRUTTORE/ANBAUER	TYP/TYPE/TIPO				
A	-A1	ELECTRONIC CARD	ELECTRONIQUE	SCHEDA ELETTRONICA	ELECTRONIC BOARD	ELCOTEC	GV179 "A"				
B	-A2	OPERATOR PANEL	PANNEAU DE COMMANDE	PANNELLO OPERATORE	BEDIENFELD	KITE	FE4943C				
	-D1	DIODE	DIODE	DIODE	DIODE	DIODE	180020000 WDK 2.5 1D A.2				
	-E1	CONTROL BOX	COFFRET DE MANEUVRE	CASSA DI COMANDO	GEHAUSE	ELDON	MAS0303015R5 300x200x155mm				
C	-E1	HANDLES	POIGNEES	MANIGLIE	GRIFFEN	TOGNU'	MF117D8				
	-E1	ADHESIVE	ADHESIF	ADESIVO	KLEBSTOFF	SERIFOT	ELCO 1841				
D	-FU1	FUSE	FUSIBLE	FUSIBILE	FUSIBILE	SICHERUNGEN	10x38 2A 4M / 4A aM				
	-FU2	FUSE	FUSIBLE	FUSIBILE	FUSIBILE	SICHERUNGEN	5x20 2A gG				
E	-HA1	LIGHT/ACOUSTIC MODULE	MODULE LUMIERE/ACOUSTIQUE	MODULO LUMINOSO/ACUSTICO	LICHTAKUSTIKMODUL	EBES	ML001H102RD				
	-KA1	RELAY	RELAYS	RELE'	RELAYS	FINDER	40528024+9505				
	-KA11	RELAY	RELAYS	RELE'	RELAYS	GAVAZZI	DPA61CM44				
F	-KM1	CONTACTOR	CONTACTEUR	CONTATTORE	SCHUTZE	TELEMECANIQUE	LC1H091087				
	-KM2	CONTACTOR	CONTACTEUR	CONTATTORE	SCHUTZE	TELEMECANIQUE	LC1H091087				
G	-QS1	MAIN SWITCH	INTERRUPTEUR GENERAL	INTERRUTTORE GENERALE	HAUPT SCHALTER	GIOVENZANA	SO032003R 3x40A+009/0001				
	-SB1-HB1	PUSH BUTTON	BOUTON	PULSANTE	PULSIEREND	TELEMECANIQUE	ZB5AV913-ZB5AZ009-ZBE101-ZB5V81				
	-SE1	PUSH BUTTON EMERGENCY	BOUTON ARRET D'URGENCE	PULSANTE FUNGO BLOCCO	PULSIERENDNOT-AUS	TELEMECANIQUE	ZB5AS844-ZB5AZ009-ZBE102				
H	-T1	TRANSFORMER	TRANSFORMATEUR	TRASFORMATORE	TRAFO	TECNOCABLAGGI	50VA 0-230-400V / 0,24V PTC				
	-XD1-1X2	JUNCTION BOX	BORNES	MORSETTIERA	KLEMMEN	WEIDMULLER	N167430 ZDK 2.5				
I	-X3	CONNECTOR	CONNECTOR	CONNETTORE	CONNECTOR	ILME	CK 03/1A-CRFP 04 + OR 03 V-CRIM 04				
J											
K											
L											
<p>CLIENTE: LOCALITA' :  CRIZAF SARONNO (VA)  PROGETTO: DATA: 17/11/2023  CRIZAF-GV179-DIS004.prg REV. DIS.: VA ETRNO: 12 FG.: DI</p>											

CONNETTORE  
INGRESSI / USCITE – 4 POLI

PLUG  
INPUT / OUTPUT – 4 PIN

