(Original) Use and maintenance manual

Type: Longitudinal slitter 2200mm
Model: LMM-200

IMPORTANT

Read this user manual and follow the instructions and warnings before operating this device.

Any modification or transformation performed on this machine may cause loss of the manufacturer's guarantee and liability.

This manual must always remain near to the machine and visible to all the operating and maintenance staff, for any future consultation, forming part of the equipment.

Index:

Page

- CE Declaration of conformity:

WE DECLARE, under our responsibility, that the machine:
- Type: Slitter
- Brand: ERM Engineering
- Model: LMM-200
- Serial No.: xxxxxx
- Manufacturer date: 2021

Inspired by the directives of the Official Journal of the European Communities:

2006/42/CE Machinery Directive
2014/35/UE Low Voltage Directive
2014/30/UE Electromagnetic Compatibility Directive

Complies with the design and construction specifications of the European Standards on General Machine Safety:

EN 349 – EN 614-1 – EN 614-2 – EN 12100 – EN 11161-1 - EN 1005-1 – EN 1005-2 – EN 1005-3 - EN 1005-4 – EN 13849-1 – EN 13849-2 – EN 894-3 – EN 13857 – EN 60204-1 – EN 14118 - EN 14120

General Manager: Eduardo Ramos Martínez

Arenys de Munt (Barcelona)-SPAIN
Date: 2021/08

- **Installation and start-up:**

1. Placement and levelling

Place the machine in the space assigned according to the measurements on the drawing, taking the manoeuvring space for the fork-lift truck within the slab loading and unloading red striped zones into account, according to its measurements.

Drill the ground through the leg holes using a 14mm bit and insert the metal fixing plugs provided by the manufacturer.

Before proceeding to tighten the bolts in the plugs, use a level to check that the frame is perfectly level on the 2 plane axes. If that is not the case, place the necessary packing under the legs on the ground to correct possible irregularities in it.

2. Electrical connections

Connect the electric supply cable of the CONTROL BOX to the 3 x 400-volt grid and the relevant earth socket.

NOTE: We recommend running this power cord through a protected conduit, so it is not an obstacle that may cause tripping or falling.

Once the power supply is connected, check the turning direction of the sandwich motor roller to perform this check.

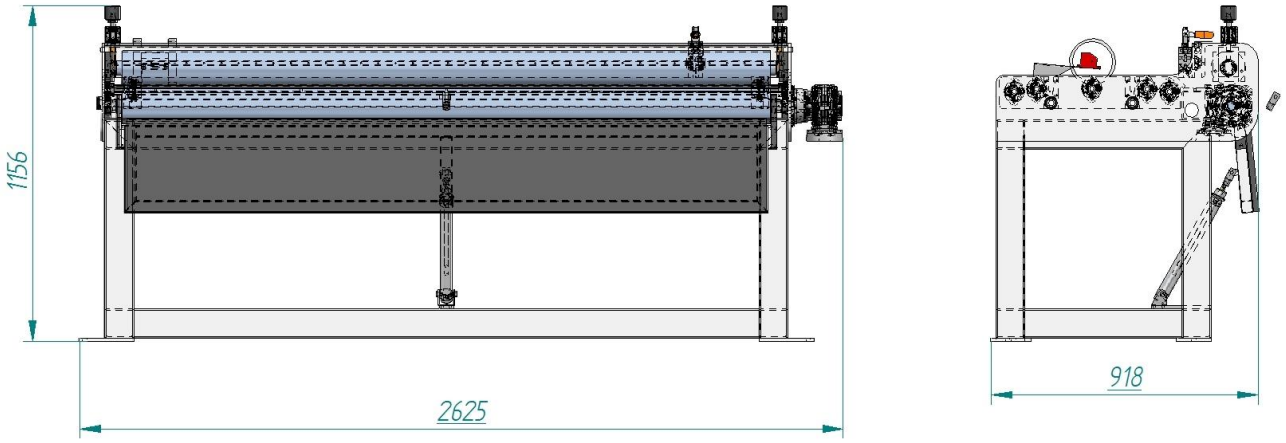
If it does turn in correct direction, the phases must be changed over and the unit be checked again.

3. Air supply connection

Supply the machine with compressed air at a pressure between 4 and 6 bar, connecting the 6 mm diameter blue hose to the grid.

- **Technical characteristics:**

Weight	467 Kg
Measurements (length x width x height)	2625x918x1156 mm.
Voltage	3 x 230V
Power	0.75 kW
Minimum air pressure	4 bar.
Max. belt width	2200 mm.
Max. belt thickness	10 mm.
Max. cutting speed	20 Mt / min.



- **Warnings and safety:**

– ERM Engineering recommends the users of this machine to fully read this user's manual prior to its use to guarantee safe work.

– It also advises and recommends equipment not being used by unqualified staff who has not received prior training from ERM Engineering.

– A copy of this manual delivered along with the machine must always remain at hand during its use, both for the production operators as well as the maintenance managers.

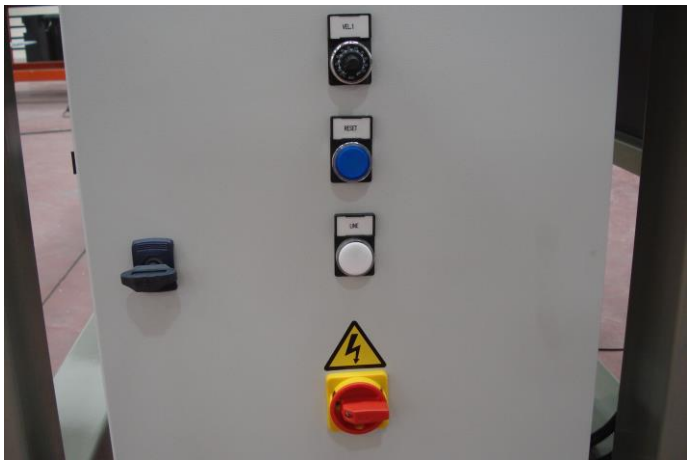
NOTE: ERM Engineering shall not be held liable under any case for damage caused by undue or improper use of this equipment.

- Any repairs or modification of the machine performed by personnel not qualified by ERM Engineering or use of non-original spare parts provided by persons unrelated to the company, shall give rise to loss of the manufacturer's guarantee.

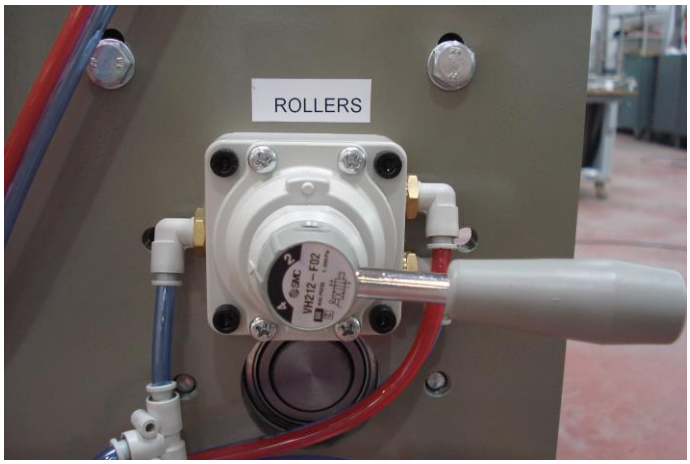
- During use of the machinery and industrial use, people are subject to the risk of damage or injury by mechanical elements in linear or gyrating movement, high voltage electric components and static components under high temperature, due to which, during design and construction of its equipment, ERM Engineering has aimed to reduce and minimise those risks by including protection devices and safety systems based on the European Community Council Directives.

- Operation:

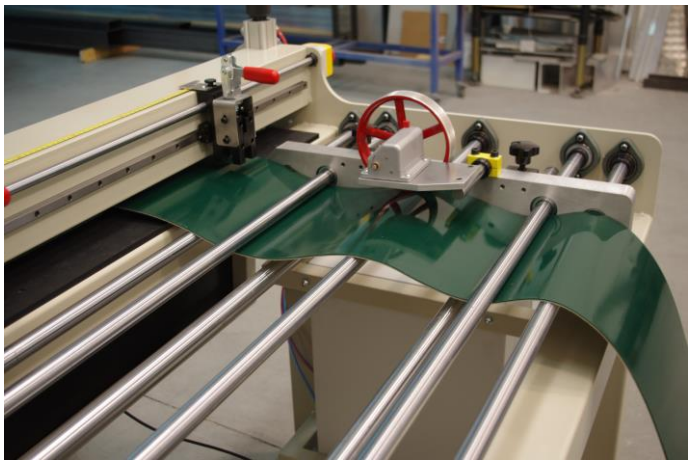
Turn on the machine with red switch and reset the electrical functions with blue button.
(Check that two STOP EMERGENCY are unhook)



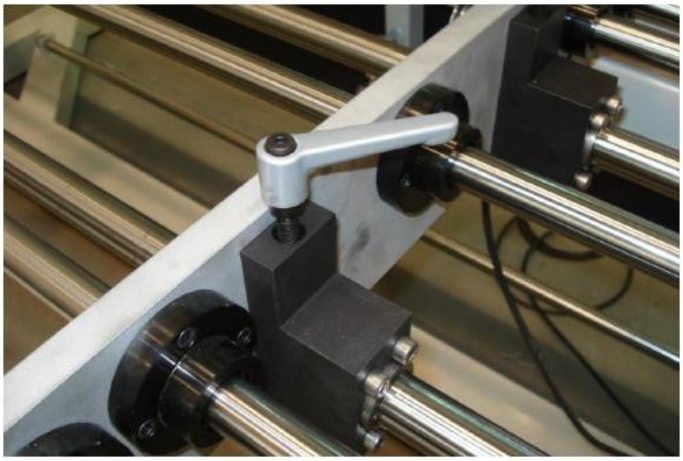
Open the rollers with pneumatic valve ROLLERS



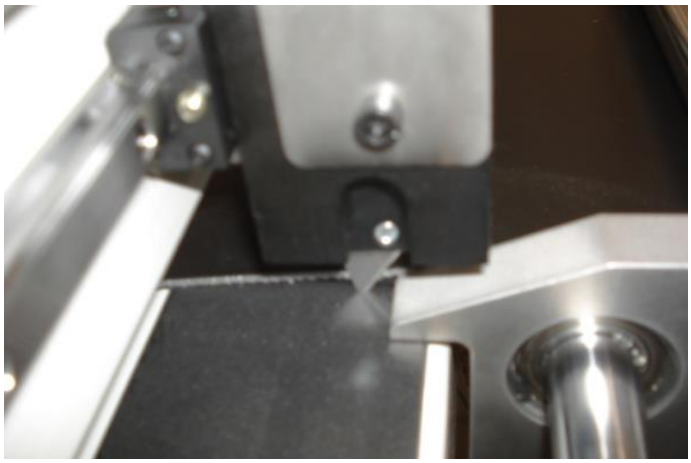
Place the end of the belt between the passage rollers, just as shown in the photo.

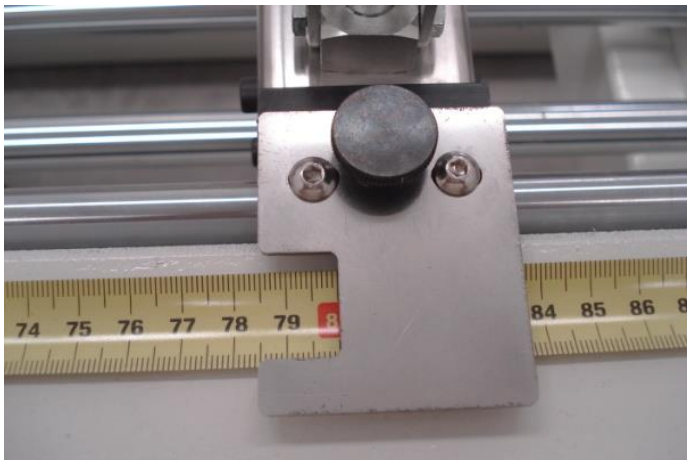


If necessary, open and adjust the guides loosen the guides handle



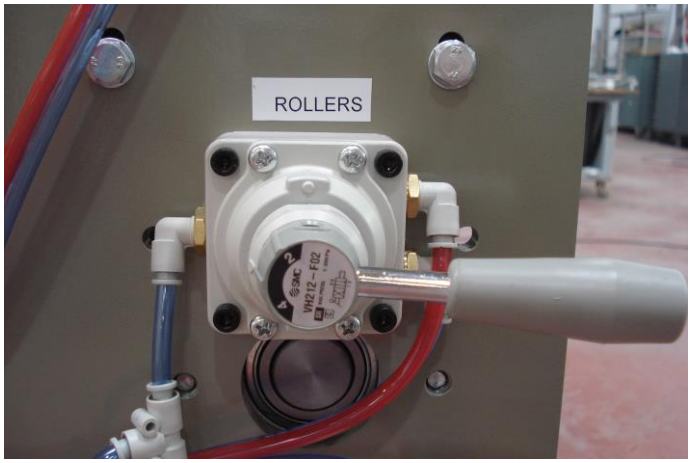
Adjust the blades to the required measurement, taking the first blade as 0 reference, placing it just tangential to the left side of the belt.





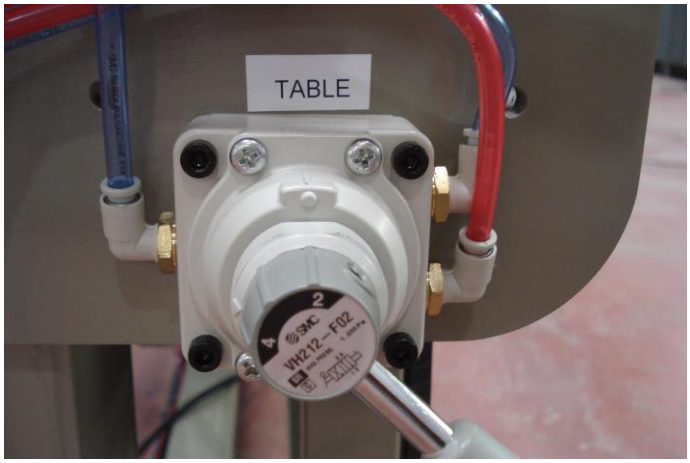
Set the measuring device to zero by pressing the red button.

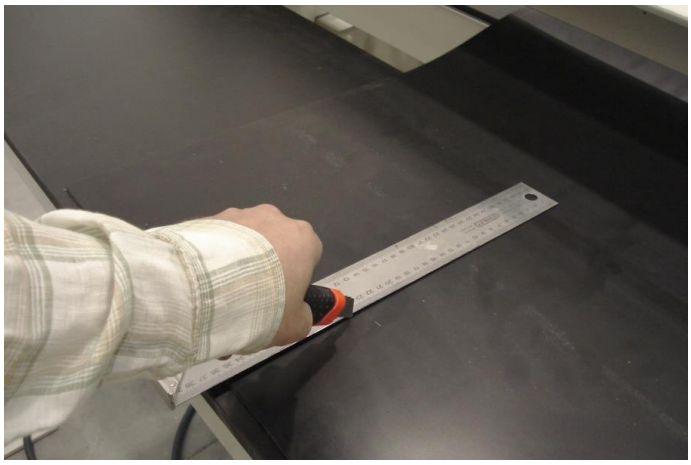
When the end of the belt is between the traction rollers and well centred by the adjusted guides, we close the top pressure roller the pneumatic valve for top roll.



Move the belt forward about 300 mm using the electric pedal.

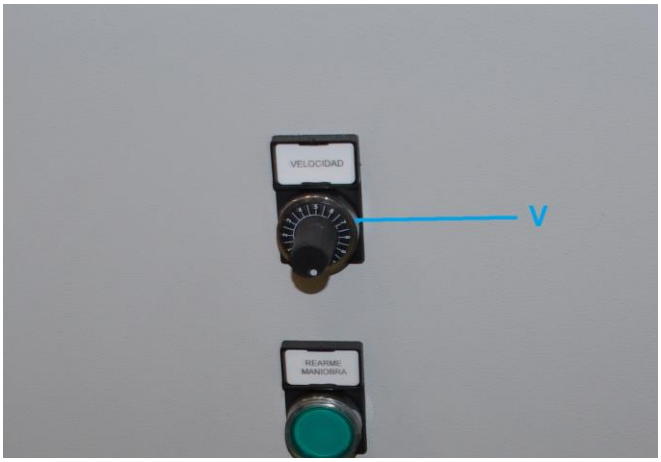
Proceed to manually cut the first uncut centimetres and lower the folding bench.





After this manual cut operation, down the table and cut the belt using feet pedal until necessary measure.

You can adjust the speed using the control box potentiometer.

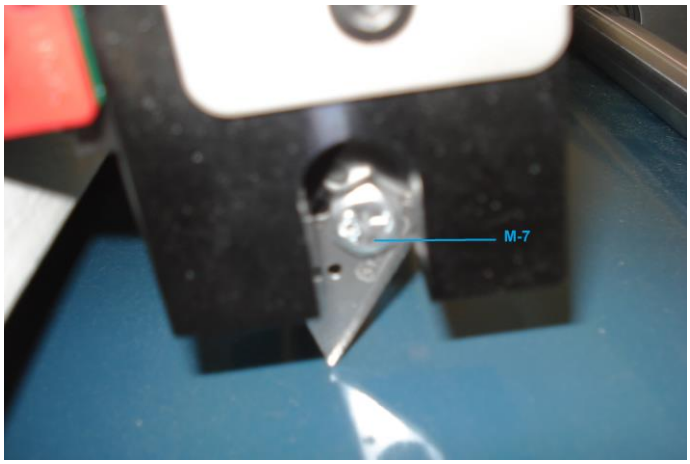


- **Maintenance and care**

Always keep the belt passage bars clean. Use alcohol or methanol to clean them.

Do not use too long pins or staples to fix the belt ends to the cardboard mandrel. These may cause scratching or pitting of the aluminium body of the shafts, that may occasionally cause severe injuries.

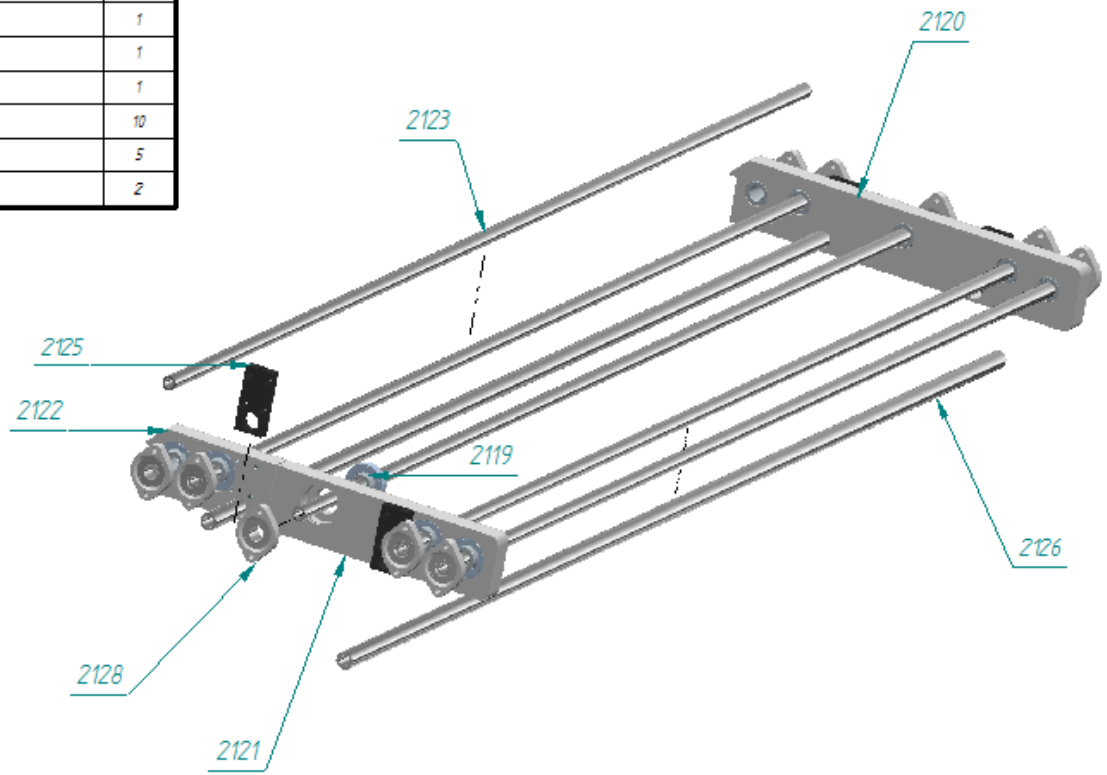
Check and replace the blades periodically, to obtain a clean cut with the least friction.



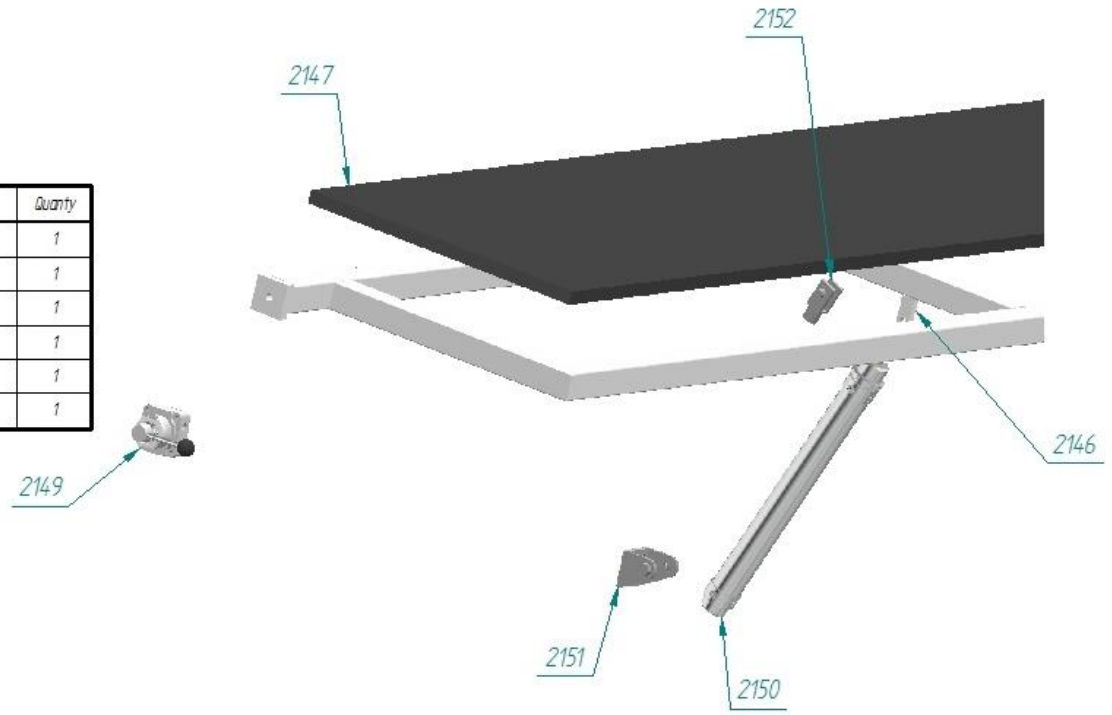
Replace the bottom nylon blade rest place when necessary due to excessive wear.

- **Spare parts:**

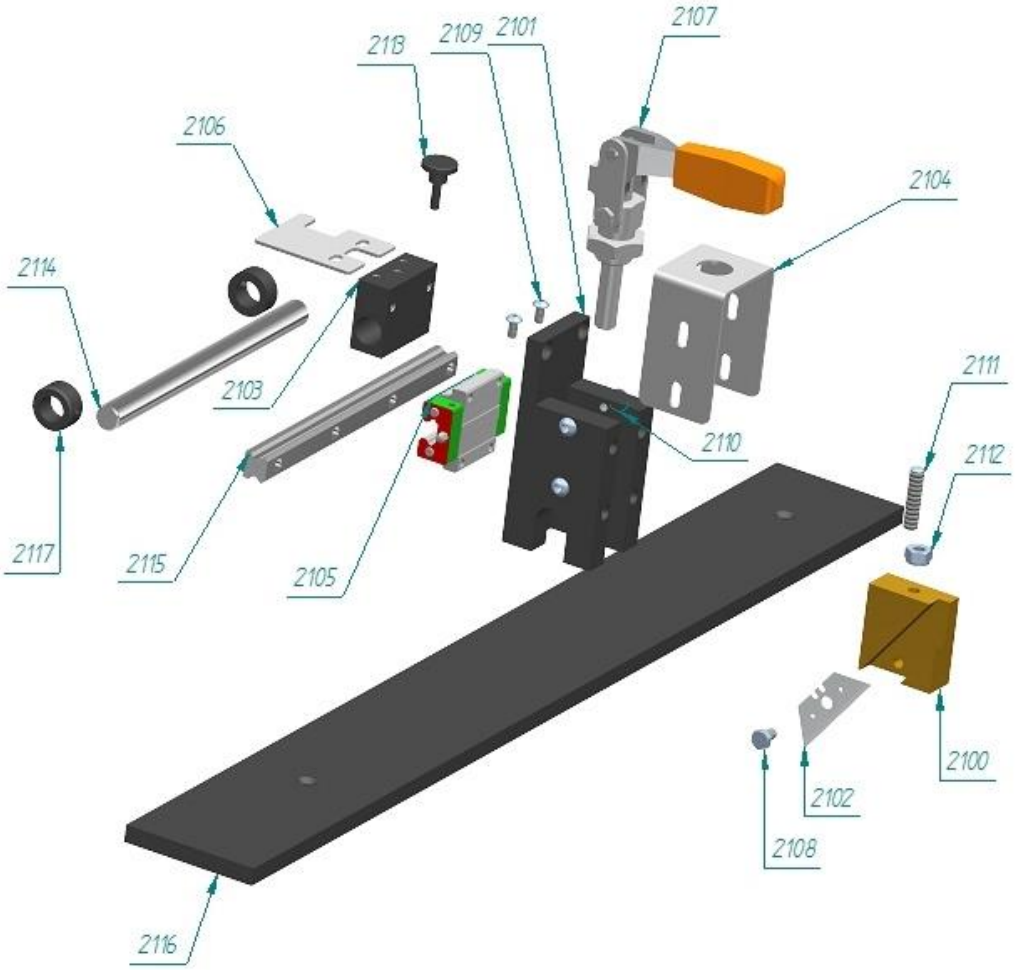
Number	Part name	Units
2119	0664-225-00,par	10
2125	Freno guias,par	4
2120	GUI4,par	1
2122	GUI42,par	1
2121	GUI43,par	1
2128	Soporte rodo 25	10
2123	Vasla tube 25x4,par	5
2126	Vasla tube 30x5,par	2



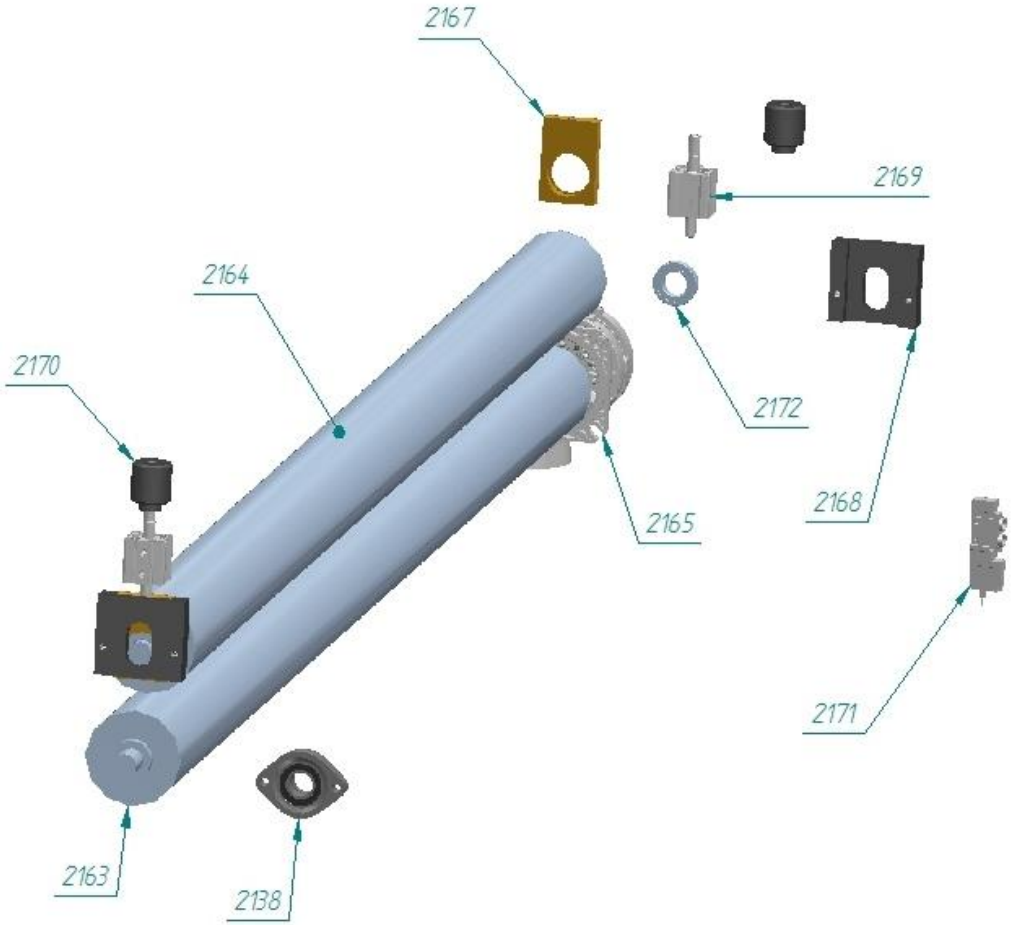
Part N°	Name	Quanty
2146	Para Clevis.par	1
2147	TABLERO ABATIBLE.par	1
2149	VH212_02.par	1
2150	body_A_C76E40_300.par	1
2151	CLEVIS_40.par	1
2152	GKM12_24A.par	1



Part N°	Name	Quanty
2100	PORTA CUCHILLA.par	1
2102	Martor 42063	1
2103	FRENO CABEZA.par	1
2104	TAPA BRIDA ARTICULADA.asm	1
2105	Patin Hiwin 15.par	1
2106	Senal Metra.asm	1
2107	gn_843_1_165_as___0...asm	1
2108	Screw_DIN_933_M7x12.par	1
2109	Screw_ISO_7380_M5x10.par	2
2110	Screw_ISO_7380_M6x10.par	4
2111	Screw_DIN_913_1980_M8x35.par	1
2112	Nut_DIN_980_M_M8_v9.00.par	1
2113	din_464_m5_16.par	1
2114	Vasla freno.par	1
2115	GUIA 16X200.par	1
2116	NYLON 1650X110X10.par	1
2117	gn_705_15_e.par	2



Part N°	Name	Quanty
2138	SOPORTE 30.par	1
2163	RODILLO INFERIOR 2200.par	1
2164	RODILLO SUPERIOR 2200.par	1
2165	mrs60_pc_fl_iec80_b14_x1.par	1
2167	Dado rodillo superior.par	2
2168	Guia dado.par	2
2169	CO2WB40-150M.asm	2
2170	Mando presion rodillo.par	2
2171	52_SY7120_L3_02.par	1
2172	Bearing_DIN_625_1_1989_6006_2RS_v9.00.par	2



- **Electrical drawings**

TECELMAC automatismos

Automatismos Tecelmac S.L.
C/ Rec del molí, 25. Nau 2. Pol. Ind. Molí de Les Planes
08470, Sant Celoni (Barcelona)
Telf. : 93.848.73.69 Mail: tecelmac@tecelmac.com

CLIENTE	:	ERMENGINEERING
DENOM. INSTALACIÓN	:	CORTADORA LMM200 3X240V 60Hz
NÚM. DIBUJO	:	18531
FABRICANTE (EMPRESA)	:	ERMENGINEERING
TIPO DE ESQUEMAS	:	ELÉCTRICOS
NORMATIVA	:	DIN
FORMATO-VERSIÓN	:	EPLAN P8
NOMBRE FICHERO	:	Z:\Feines\EPLAN P8\Esquemes\18531
LUGAR DE INSTALACIÓN	:	ARENYS DE MUNT
RESPONSABLE DEL PROYECTO	:	J.S.P.
FECHA DE REALIZACIÓN	:	11/12/2018
ELABORADO POR	:	BPUIG

CARACTERÍSTICAS TÉCNICAS

TENSIÓN DE ALIMENTACIÓN	:	240V 3F+PE
TENSIÓN DE MANDO	:	24 VAC
POTENCIA	:	1 kW
CANTIDAD MÁX. DE PÁGINAS	:	1
CANTIDAD TOTAL DE PÁGINAS	:	14

+IND/2

Cliente	Localidad	ARENYS DE MUNT	Fecha de creación	11/12/2018	Pág. PORTADA PROYECTO	Nº de proyecto	= GEN
ermengineering belting fabrication equipment	País	ESPAÑA	Editado por	BPUIG	Descripción del proyecto CORTADORA LMM200 3X240V 60Hz	18531	+ POR
	Fabricante	ERMENGINEERING	Aprovado por	J.S.P.			Hoja 1
	Original		Fecha modificación	16/01/2019			Total 14

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=GEN+IND/2	ÍNDICE DE PÁGINAS	2	11/12/2018		
=ESQ+C1/3	PORTADA ARMARIO C1	3	11/12/2018		X
=ESQ+C1/4	RELACIÓN DE BORNEROS Y CONECTORES	4	11/12/2018		X
=ESQ+C1/5	ENTRADA ALIMENTACIÓN	5	11/12/2018		
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=ESQ+C1/7	RELÉ DE SEGURIDAD	7	11/12/2018		
=ESQ+C1/8	MOTOR BOBINADOR M1	8	11/12/2018		
=ESQ+C1/9	MOTOR BOBINADOR M1	9	11/12/2018		
=DOC+LAY/12	PORTADA LAYOUT	12	11/12/2018		X
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=DOC+LAY/14	VISTA INFERIOR ARMARIO	14	11/12/2018		
=DOC+LAY/15	VISTA FRONTAL ARMARIO	15	11/12/2018		
=DOC+LAY/16	BORNERO ARMARIO	16	11/12/2018		

+POR/1 =ESQ+C1/3

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ermengineering	País	ESPAÑA	Editado por	BPUIG	TECELMAC automatismos	Descripción del proyecto CORTADORA LMM200 3X240V 60Hz	18531	+ IND
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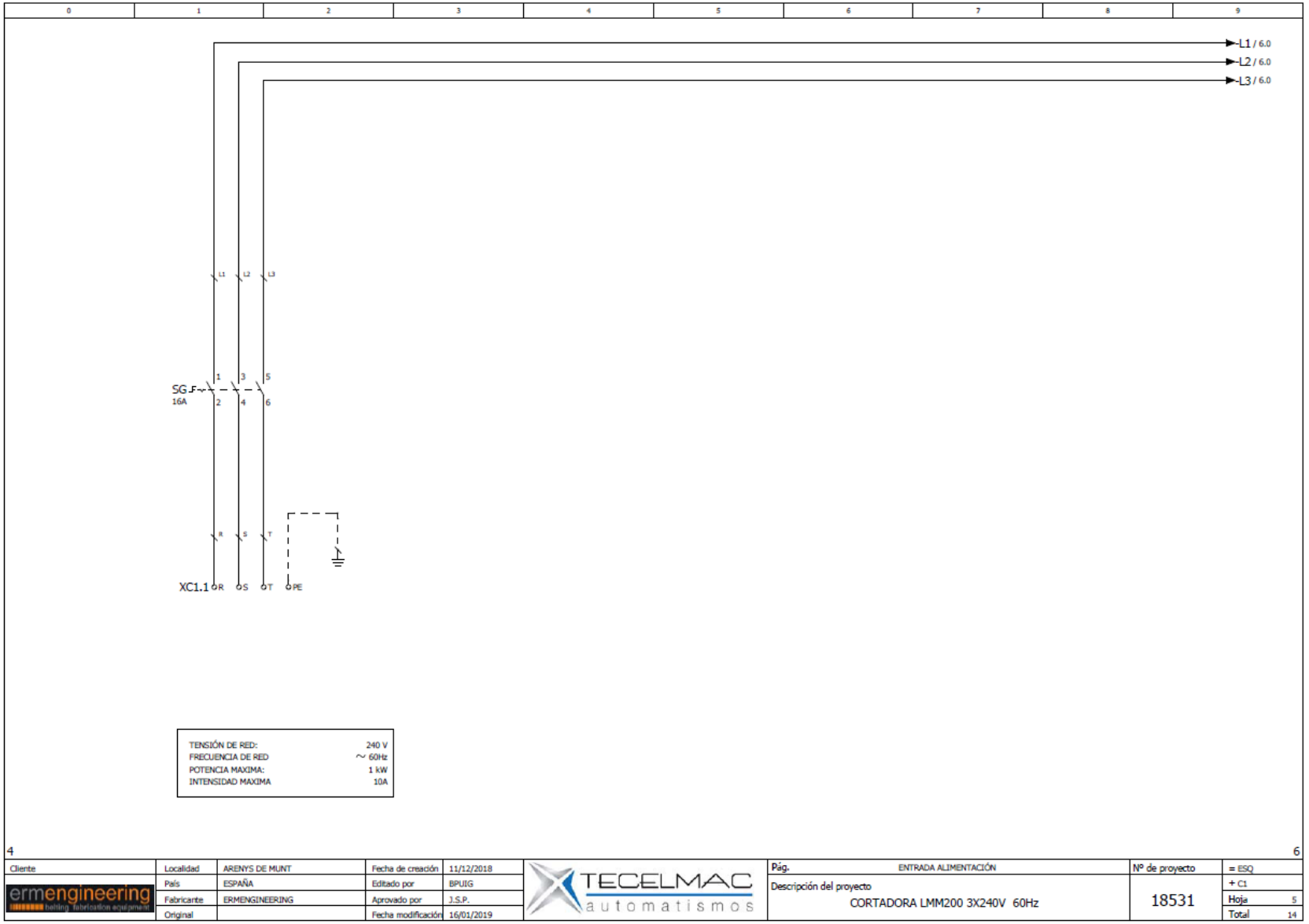
	Original		Fecha modificación	16/01/2019				Total 14


0
1
2
3
4
5
6
7
8
9
L1 / 6.0
L2 / 6.0
L3 / 6.0
SG.F
16A
XC1.1
R
S
T
PE
TENSIÓN DE RED: 240 V
FRECUENCIA DE RED ~ 60Hz
POTENCIA MAXIMA: 1 kW
INTENSIDAD MAXIMA 10A
4
6
Cliente
Localidad ARENYS DE MUNT
País ESPAÑA
Fabricante ERMENGINEERING
Original
Fecha de creación 11/12/2018
Editado por BPUIG
Aprovado por J.S.P.
Fecha modificación 16/01/2019
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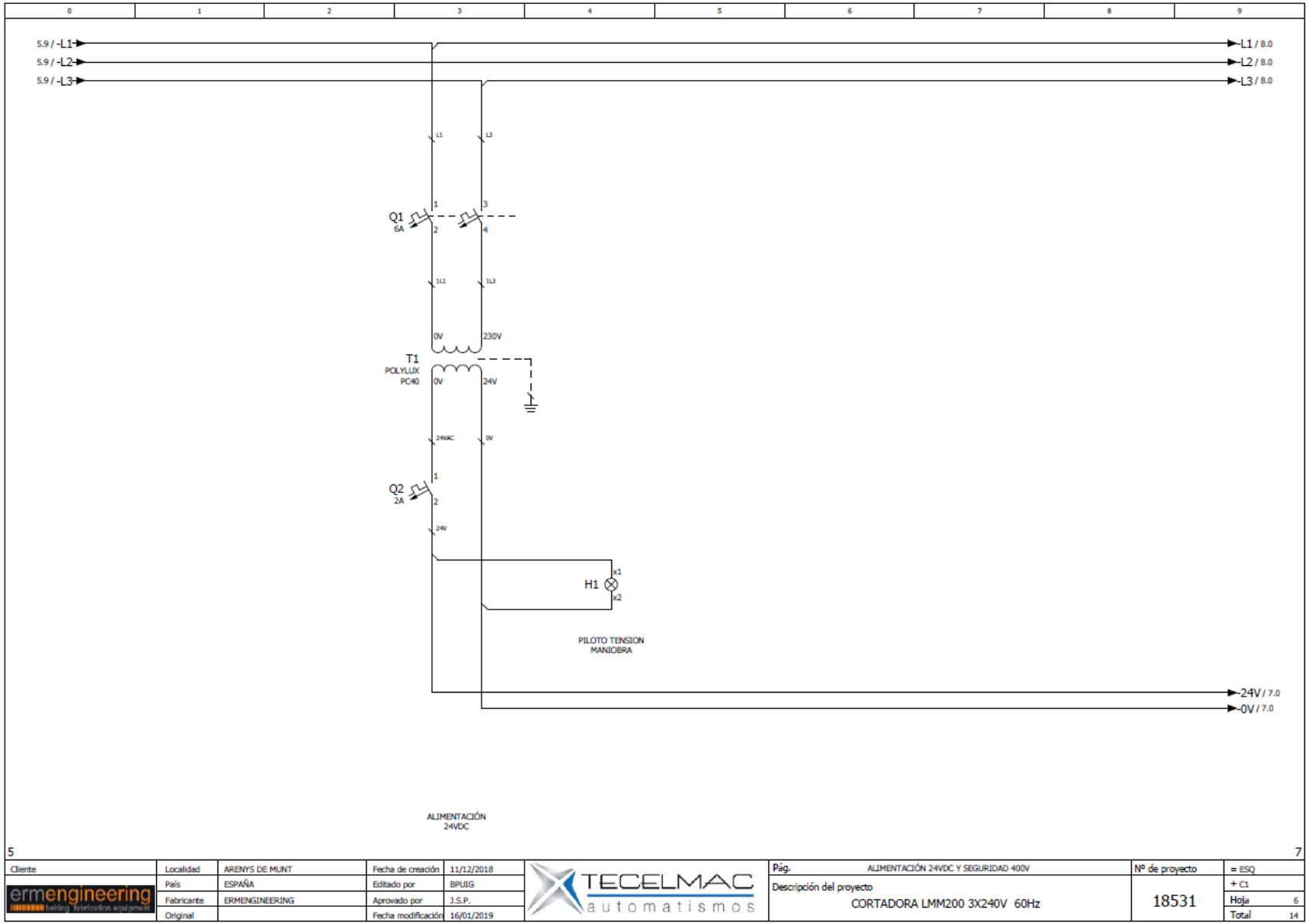
Total 14


5.9 / -L1
5.9 / -L2
5.9 / -L3
L1 / 8.0
L2 / 8.0
L3 / 8.0
Q1
6A
T1
POLYLUX
PC40
0V
230V
24V
24VAC
Q2
2A
H1
PILOTO TENSION
MANIOBRA
-24V / 7.0
-0V / 7.0
ALIMENTACIÓN
24VDC
Cliente
ermengineering
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Aprovado por
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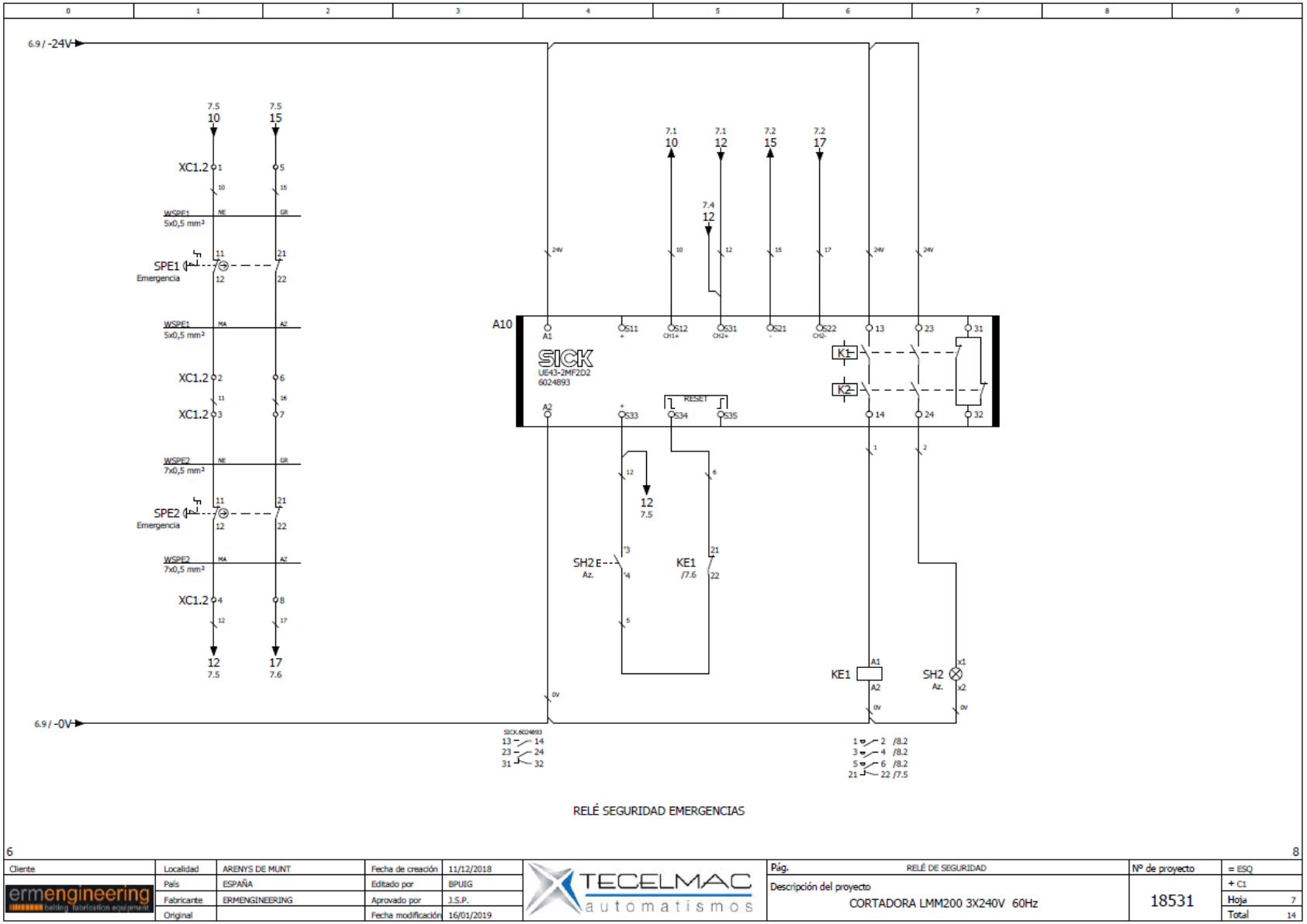
6.9 / -24V
6.9 / -0V
XC1.2
WSPE1
5x0,5 mm²
SPE1
Emergencia
WSPE2
7x0,5 mm²
SPE2
Emergencia
A10
SICK
UE43-2MF2D2
6024893
RESET
K1
K2
SH2
Az.
KE1
/7.6
RELÉ SEGURIDAD EMERGENCIAS
Cliente
ermengineering
Localidad
ARENYS DE MUNT
País
ESPAÑA
Fabricante
ERMENGINEERING
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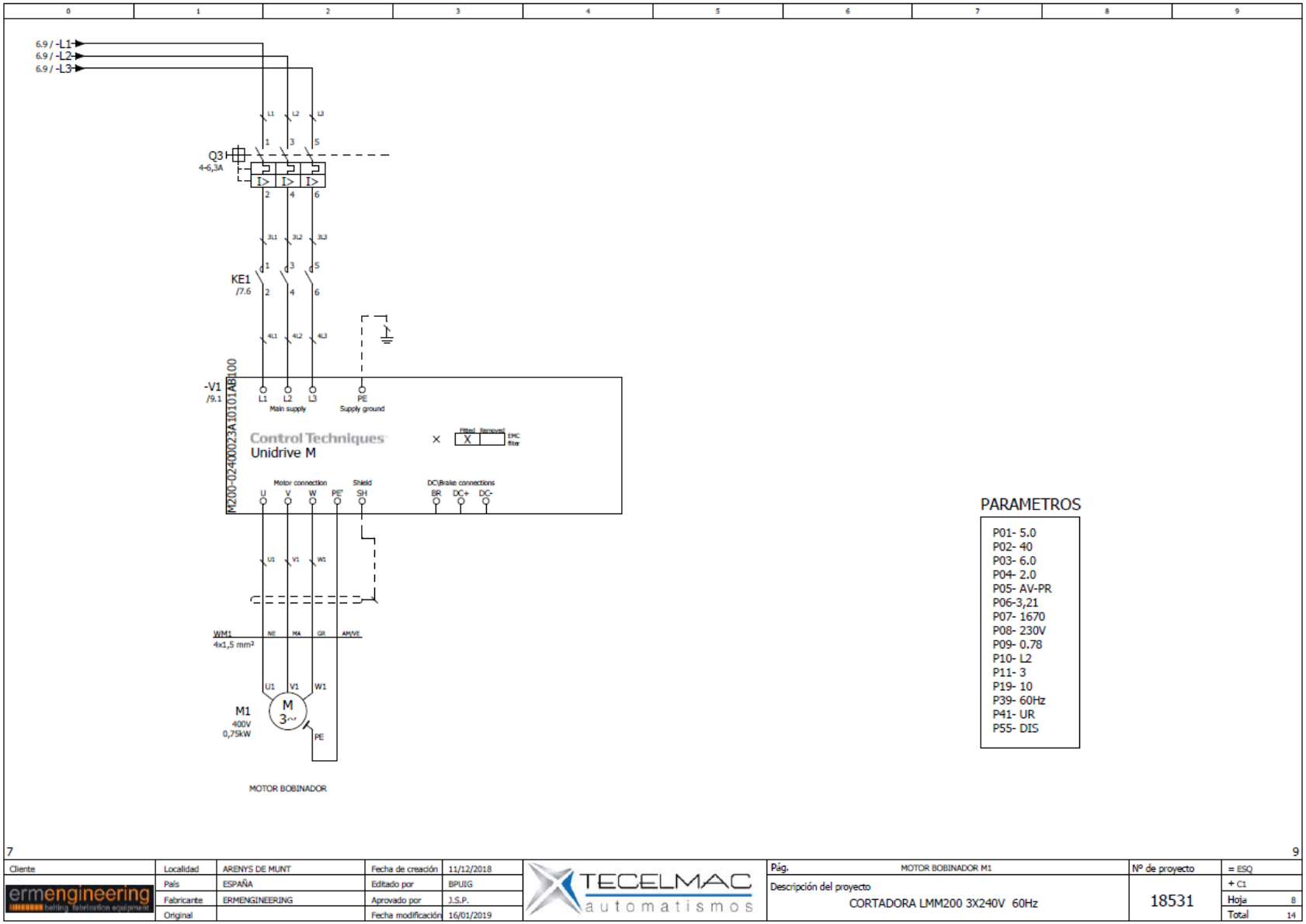
6.9 / -L1
6.9 / -L2
6.9 / -L3
Q3
4-6,3A
KE1
/7.6
-V1
/9.1
M200-02400023A10101AB100
Main supply
Supply ground
Control Techniques
Unidrive M
Motor connection
Shield
DC\Brake connections
WM1
4x1,5 mm²
M1
400V
0,75kW
MOTOR BOBINADOR
PARAMETROS
P01- 5.0
P02- 40
P03- 6.0
P04- 2.0
P05- AV-PR
P06-3,21
P07- 1670
P08- 230V
P09- 0.78
P10- L2
P11- 3
P19- 10
P39- 60Hz
P41- UR
P55- DIS
Cliente
ermengineering
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Editado por
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Aprovado por
J.S.P.
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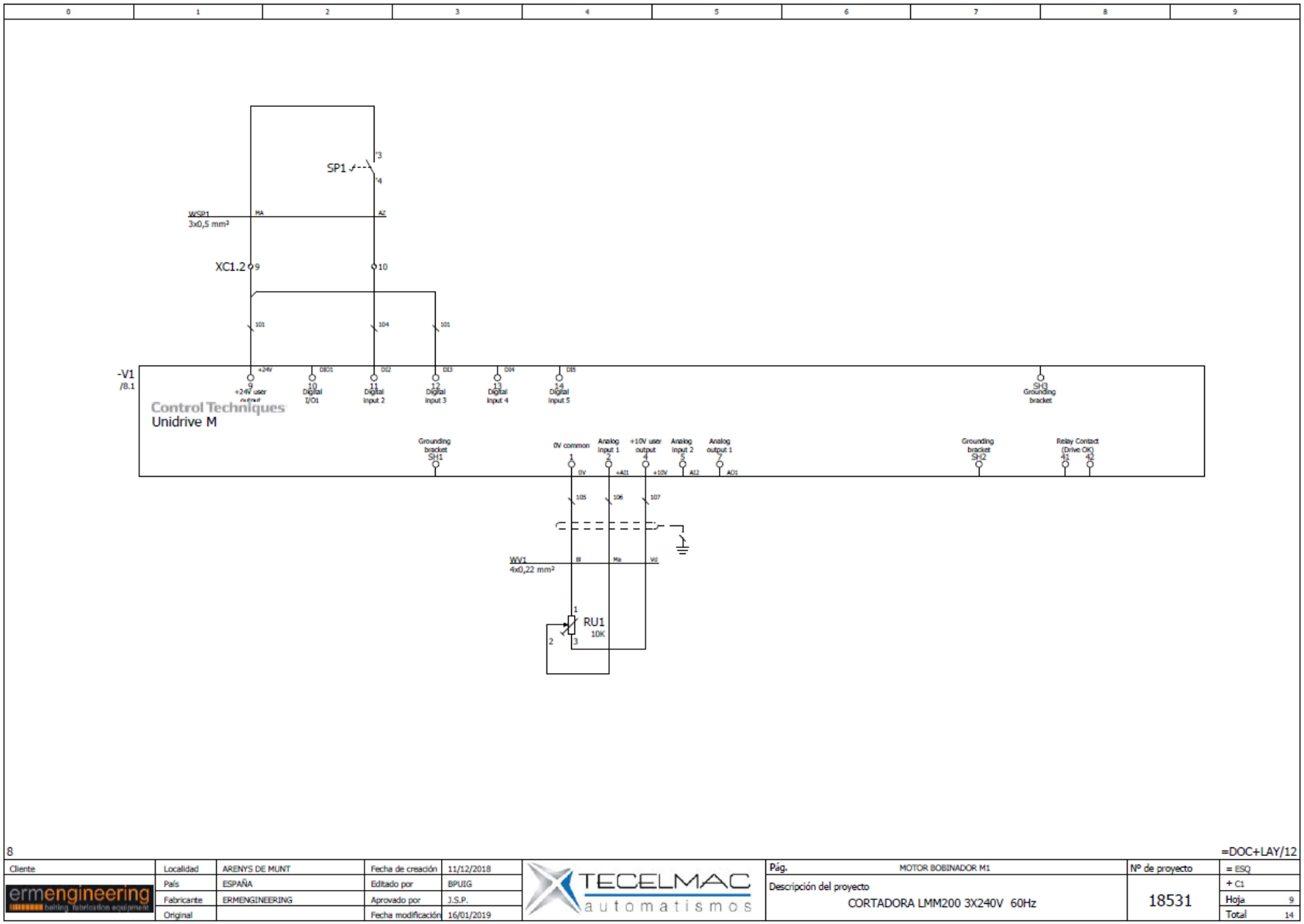
SP1
WSP1
3x0,5 mm²
XC1.2
-V1
/8.1
Control Techniques
Unidrive M
WV1
4x0,22 mm²
RU1
10K
8
=DOC+LAY/12
Cliente
ermengineering
Localidad
ARENYS DE MUNT
País
ESPAÑA
Fabricante
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