

Thy - t r o n i c i / s
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SCREWCOMPRESSOR CONTROL

CELLmatic 1502

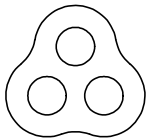
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Revised		Order no.		Project		Caddy no.	
Index	Date			SCREWCOMPRESSOR		00395	
PH	01.02.1999	Prep.		CELLmatic 1502	Plant	Drawing no.	Rev.
		Date	07.06.1999		=A1	69 451 0001	01
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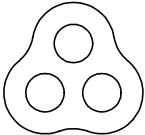
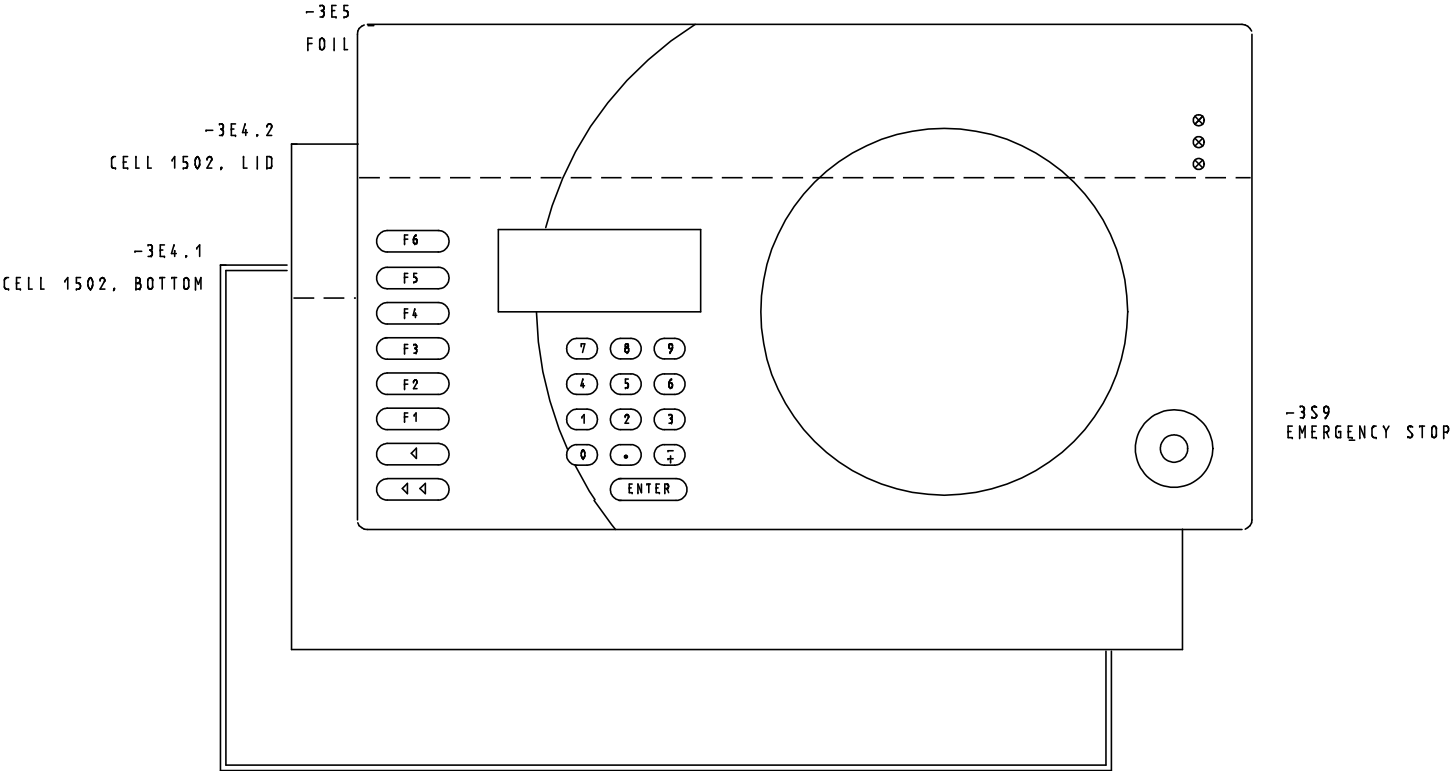
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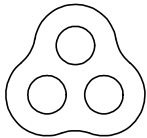
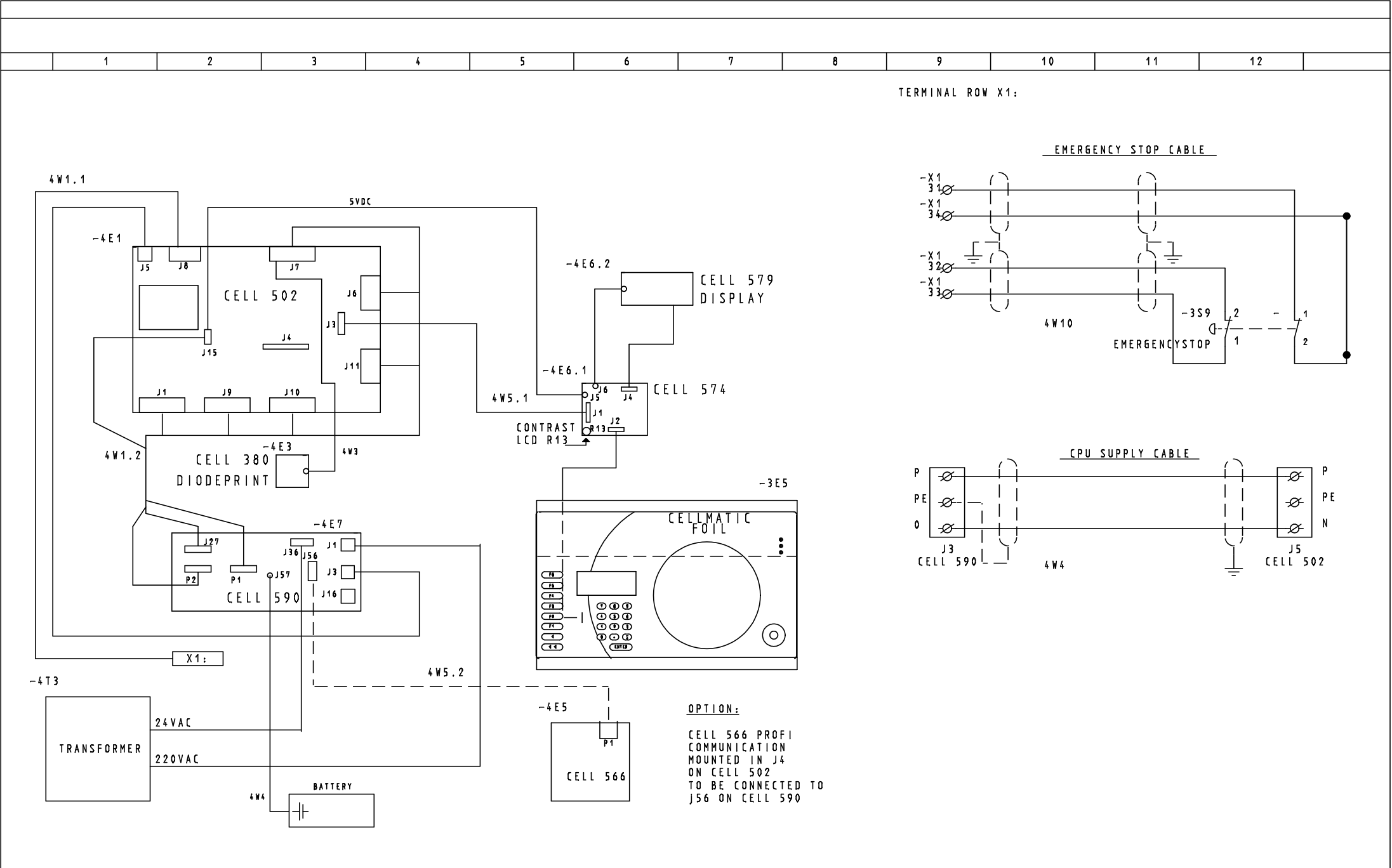
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KB	07.06.1999	Date	15.03.1999			=A1	69 451 0001
		Contr.		WIRING BETWEEN CELLmatic ITEMS		Plac.	Page
						+P1	4

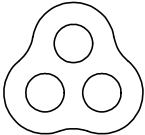
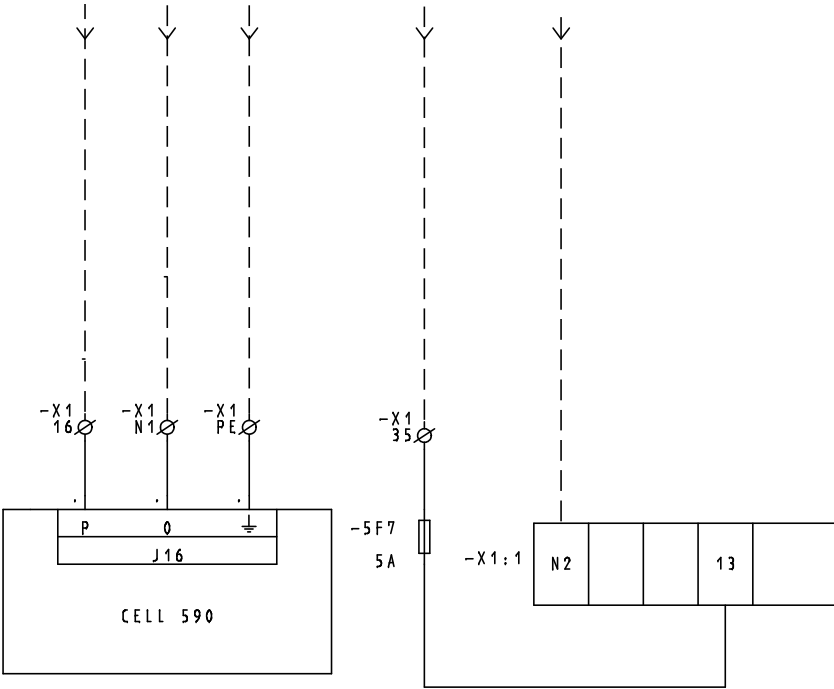
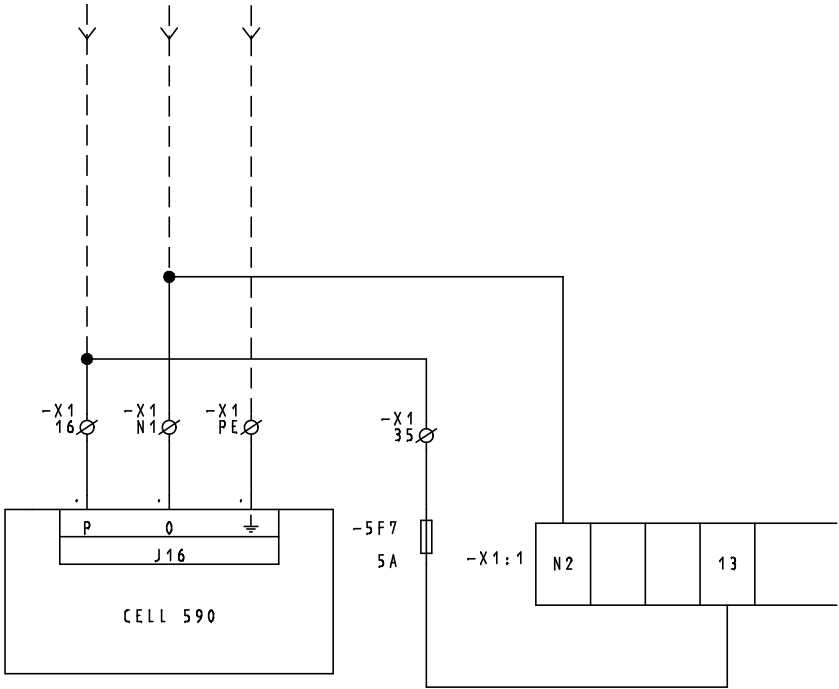
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-SUPPLY 230V			SUPPLY SOLENOID VALVE 230V			-SUPPLY 230V			SUPPLY SOLENOID VALVE 24-200VDC 230VAC		
1	2	3	4	5	6	7	8	9	10	11	12

WITH 230VAC SOLENOID VALVES

WHEN 24V - 200VAC SOLENOID VALVES,
SUPPLY MUST COME FROM EXTERNAL
TRAFD 250VA, AND NOT FROM J16,
ON CELL 590
CONNECTIONS FROM X1:16, X1:35 AND
X1:N1 TO X1:N2 MUST BE REMOVED.



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				SUPPLY		+P1	5
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	CAPACITY UP	CAPACITY DOWN	VOLUME UP	VOLUME DOWN	ECONOMISER	BYPASS	HIGH LIQUID INJECTION	LOW LIQUID INJECTION	POWER KIT	OIL EQUALISING	SOLENOID VALVE	SOLENOID VALVE	
	1	2	3	4	5	6	7	8	9	10	11	12	

REMARK 1

REMARK 2

REMARK 1 SCREW WITH CAP. STAGES.

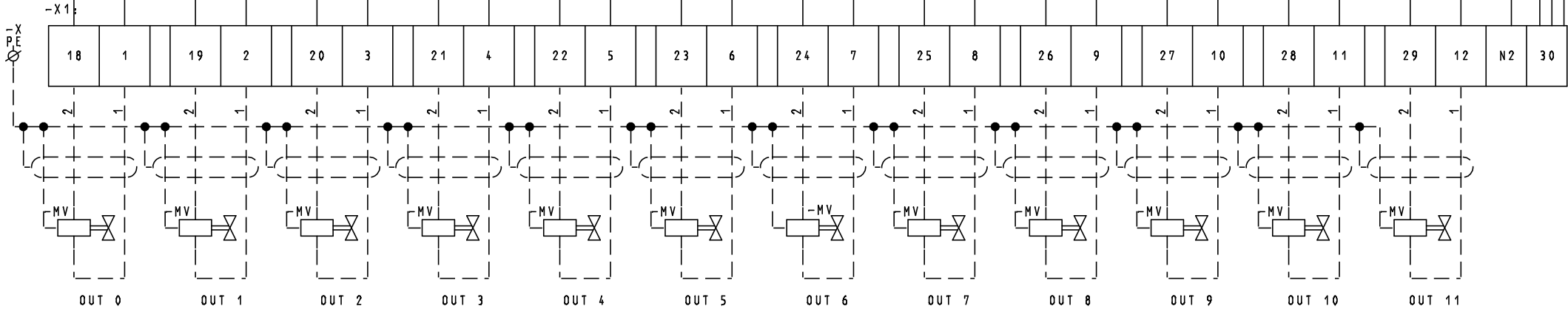
OUT 0	OUT 1	COMPRESSOR RUNNING	OUTPUT
OFF	OFF	NO	0
OFF	OFF	YES	50%
ON	OFF	YES	75%
ON	ON	YES	100%

REMARK 2 SCREW WITH 3 VI STAGES.

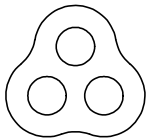
OUT 2	OUT 3	VI	
OFF	OFF	5.0	SCREW WITHOUT VOLUME OUT 2 AND OUT 3 ARE NOT USED.
OFF	ON	3.5	
ON	ON	2.2	

J8 CELL 502

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BLACK	BROWN	RED	PINK	YELLOW	GREEN	BLUE	VIOLET	GREY	WHITE	GREY/PINK	BLUE/RED	WHITE/GREEN	YELLOW/BROWN	WHITE/YELLOW



FOR 230VAC VALVES. SEE PAGE 5 IF ALTERNATIVE SUPPLY REQUIRED



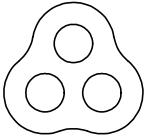
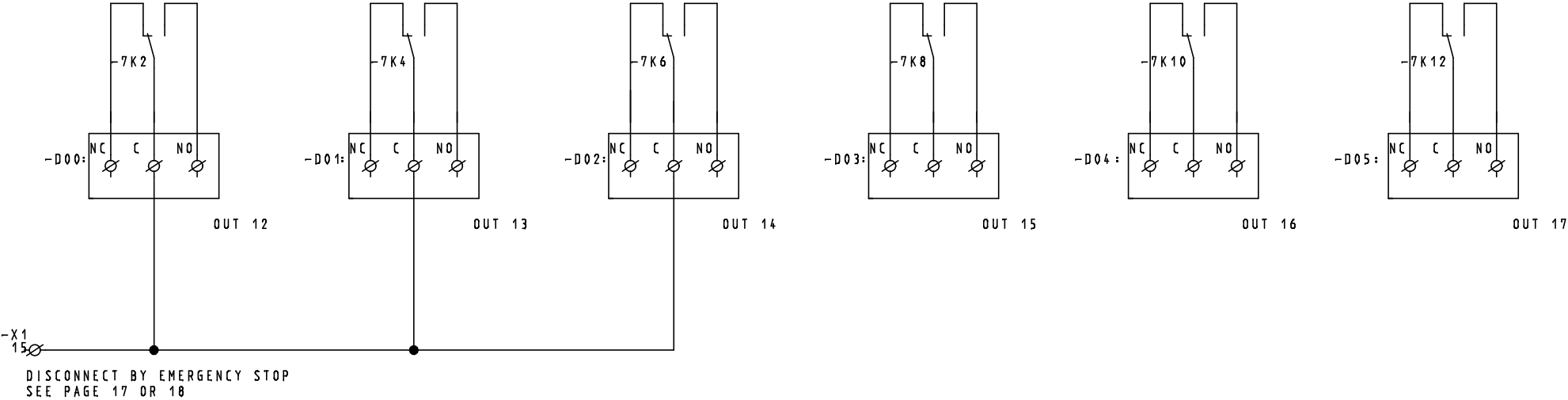
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		Contr.				Plac.	Page
				WIRING OF SOLENOID VALVES		+P1	6

		COMPRESSOR START		OIL PUMP START		OIL HEATER		COMMON ALARM		MAX. OUTPUT		COMMON CUTOUT	
	1	2	3	4	5	6	7	8	9	10	11	12	



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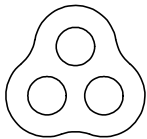
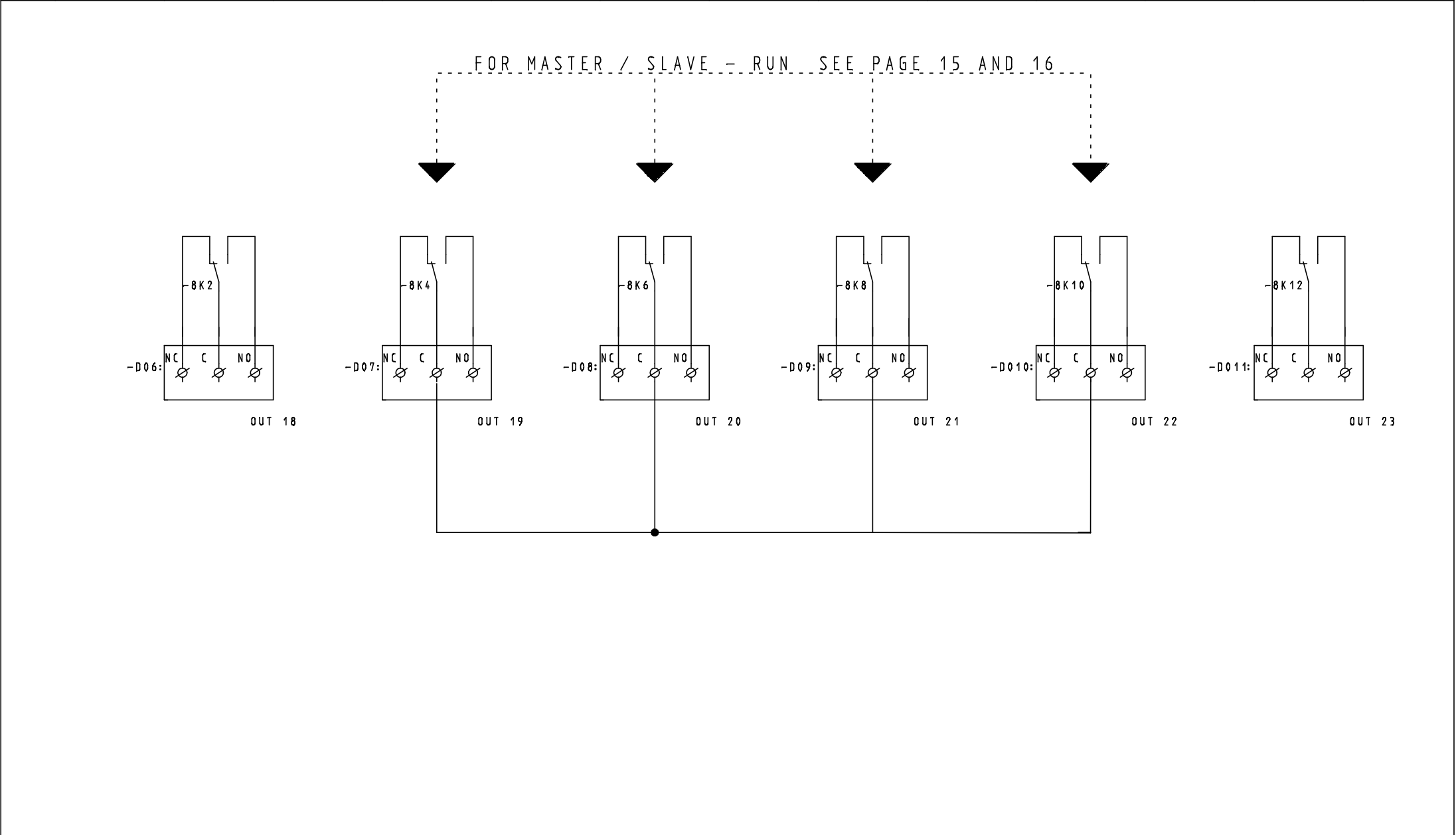
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				CONNECTION TO DIGITAL OUTPUT		+P1	7

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		BOOSTER START		SLAVE START		SLAVE CAP. UP		SLAVE CAP. DOWN		SLAVE > MIN		READY TO RUN	
	1	2	3	4	5	6	7	8	9	10	11	12	



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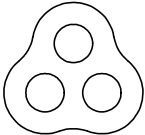
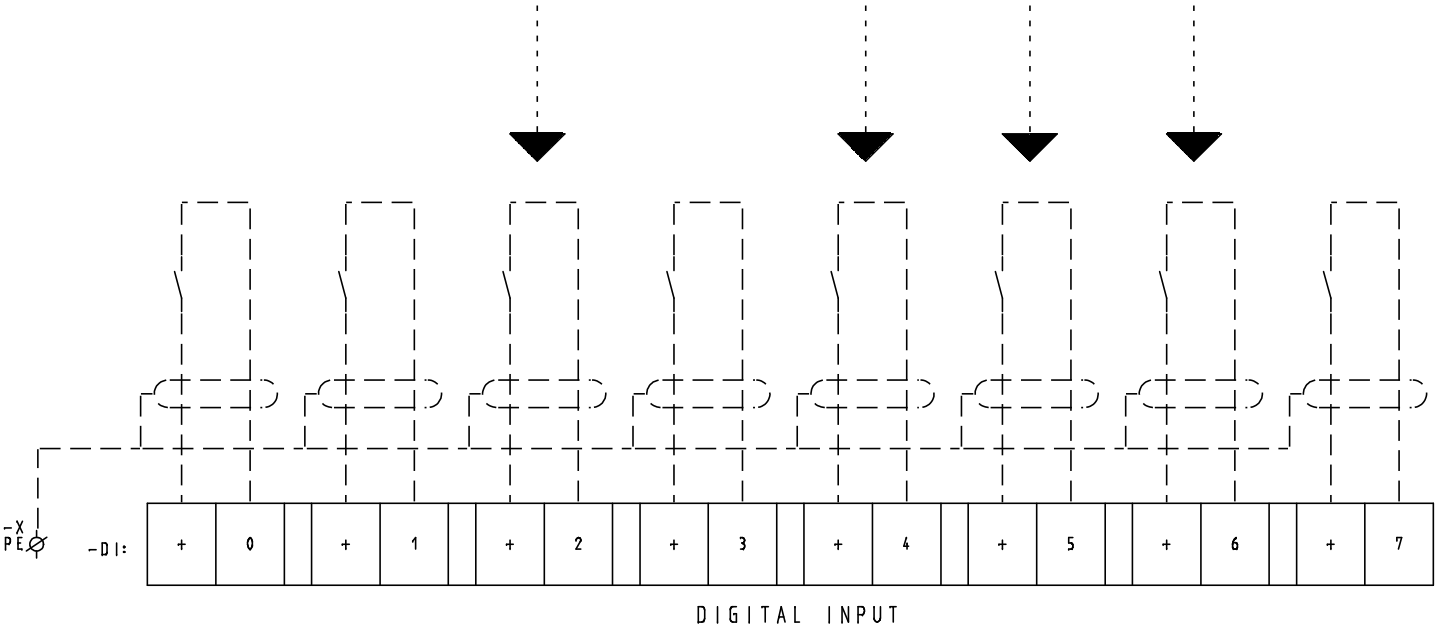
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				CONNECTION TO DIGITAL OUTPUTS		+P1	8

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			OIL LEVEL	COMPRESSOR RUN	PREVIOUS > MIN	START COMPRESSOR	START SLAVE	CAPACITY UP	CAPACITY DOWN	EXTERNAL ERROR			
	1	2	3	4	5	6	7	8	9	10	11	12	

FOR MASTER / SLAVE - RUN SEE PAGE 15 AND 16



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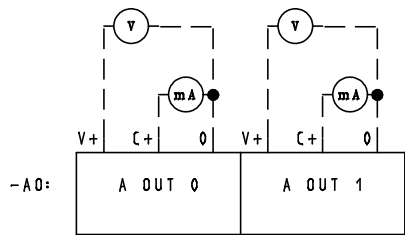
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				CONNECTIONS TO DIGITALS INPUTS		+P1	9

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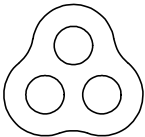


A OUT 0 OPTIONAL PARAMETER
A OUT 1 OPTIONAL PARAMETER

SCREW WITH CAPACITY STAGES

ON EACH CHANNEL THE FOLLOWING CAN BE SELECTED: ON EACH CHANNEL THE FOLLOWING CAN BE SELECTED:
OUTPUT, AMPERE, OIL DIFF., P-SUCTION, P-DISCHARGE. FILTER, AMPERE, OIL DIFF., P-SUCTION, P-DISCHARGE.

FROM THE TWO CHANNELS THE FOLLOWING CAN BE SELECTED:	FROM THE TWO CHANNELS THE FOLLOWING CAN BE SELECTED:
OUTPUT = 0-100% 4-20mA / 2-10V	FILTER = 0-5 BAR 4-20mA / 2-10V
AMPERE = 0-150% 4-20mA / 2-10V	AMPERE = 0-150% 4-20mA / 2-10V
OILDIFF. = 0-25 BAR 4-20mA / 2-10V	OIL DIFF. = 0-25 BAR 4-20mA / 2-10V
P-SUCTION = -1 - +6 BAR 4-20mA / 2-10V	P-SUCTION = -1 - +6 BAR 4-20mA / 2-10V
P-DISCHARGE = 0-25 BAR 4-20mA / 2-10V	P-DISCHARGE = 0-25 BAR 4-20mA / 2-10V



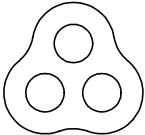
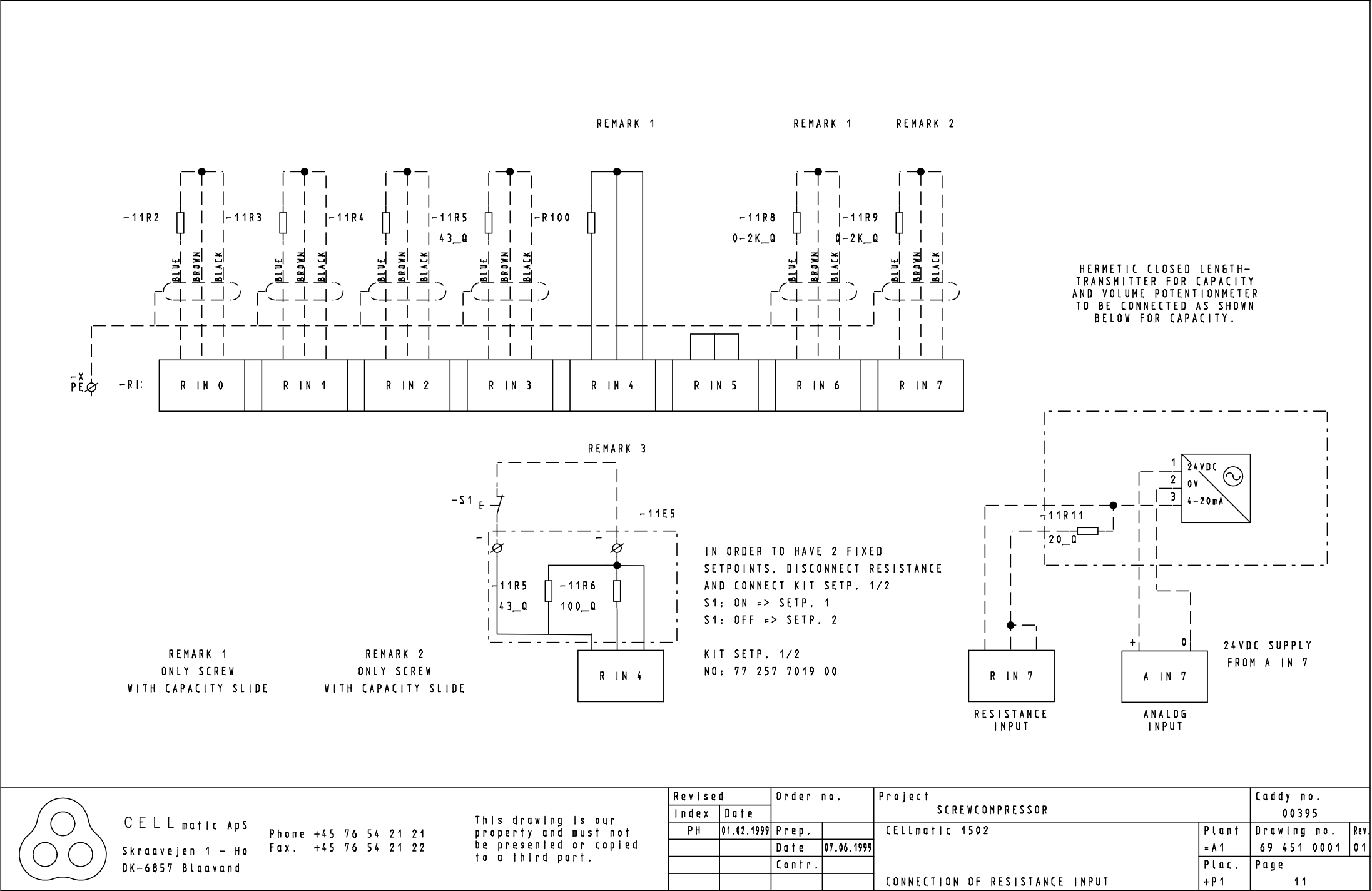
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		Contr.						Plac.	Page	
				ANALOG OUTPUT 4-20mA / 2-10V				+P1	10	

		T-DISCHARGE PIPE	T-OIL SEPARATOR	T-SUCTION	T-OIL COMPRESSOR	CHANGE SETP. 1 OR 2	AVAILABLE	VOLUME POS.	CAPACITY POS.			
	1	2	3	4	5	6	7	8	9	10	11	12



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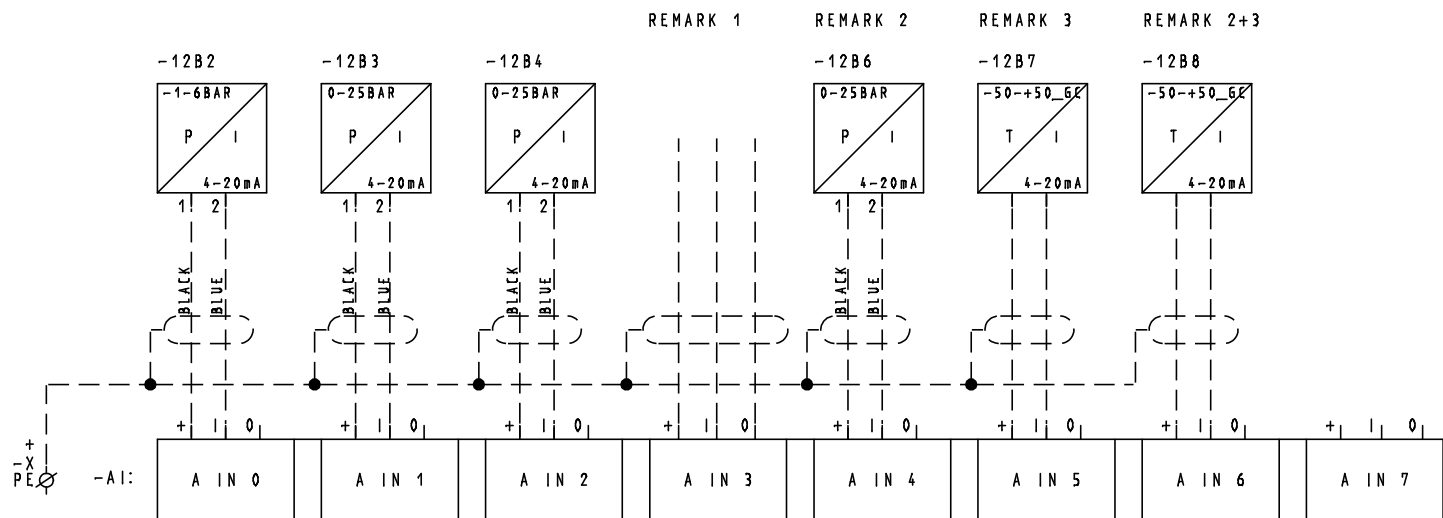
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				CONNECTION OF RESISTANCE INPUT		+P1	11

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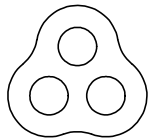
		P-SUCTION	P-DISCHARGE	P-OIL	MOTOR AMPERE 0-100%	P-OIL V FILTER	T-BRINE OUTLET	T-BRINE INLET	AVAILABLE			
	1	2	3	4	5	6	7	8	9	10	11	12



REMARK 1
MOTOR CURRENT SIGNAL FROM MAINPANEL
0 - 100% / 4 - 20 mA
SEE PAGE 017 - 018

REMARK 2
NOT INSTALLED ON ALL UNITS

REMARK 3
ONLY INSTALLED WHEN AGG. IS TO BE
CONTROLLED FROM A TEMPERATURE
TRANSMITTER
-50_6C - +50_6C / 4 - 20mA



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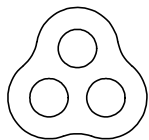
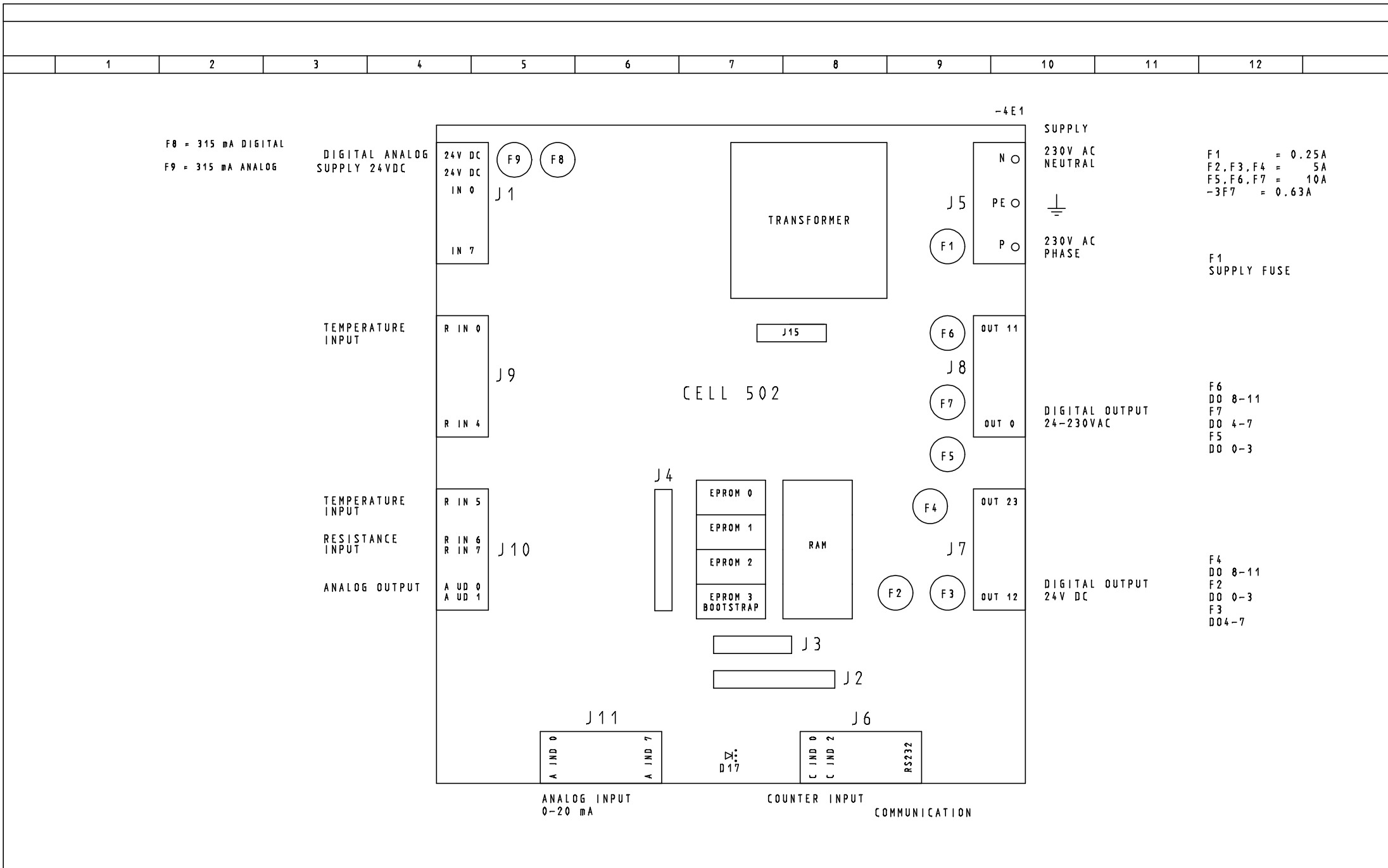
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				ANALOG INPUT 4-20mA ON CELL 590		+P1	12

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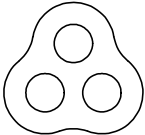
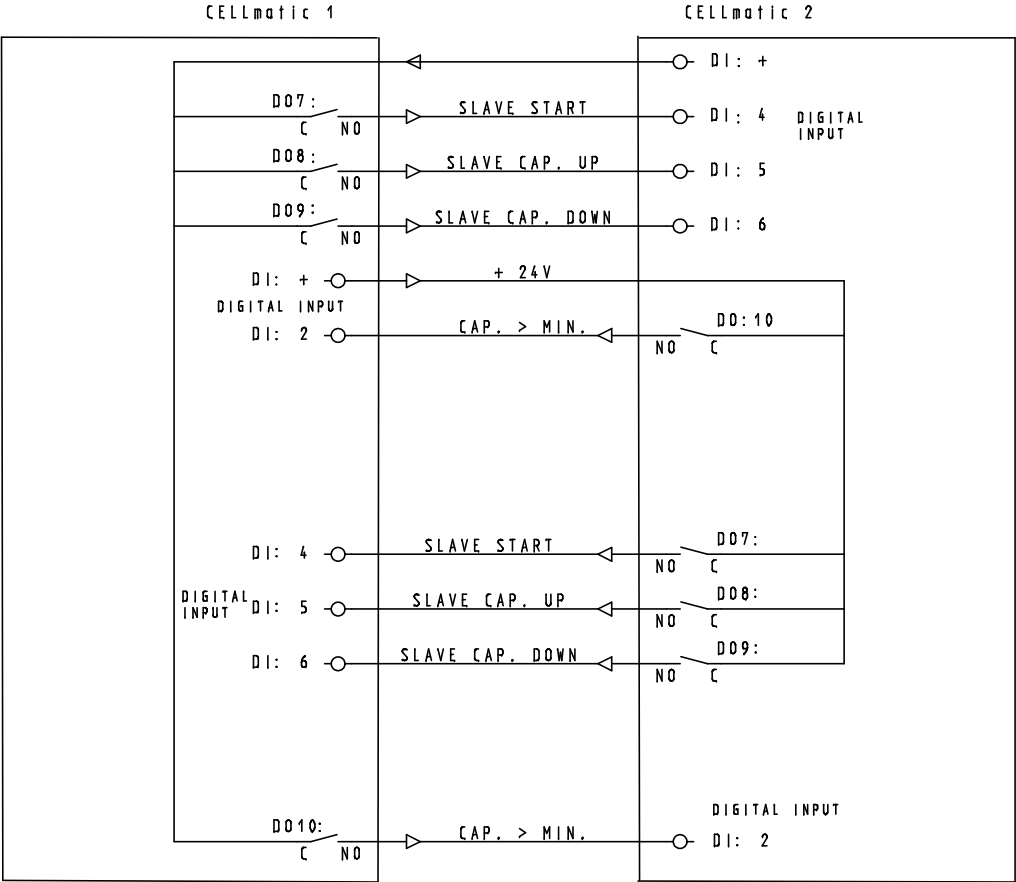
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				LAYOUT CELL 502		+P1	14

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MASTER/SLAVE CONNECTIONS
WITHOUT PROFI CELL 566 CARD



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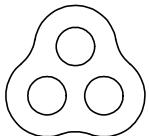
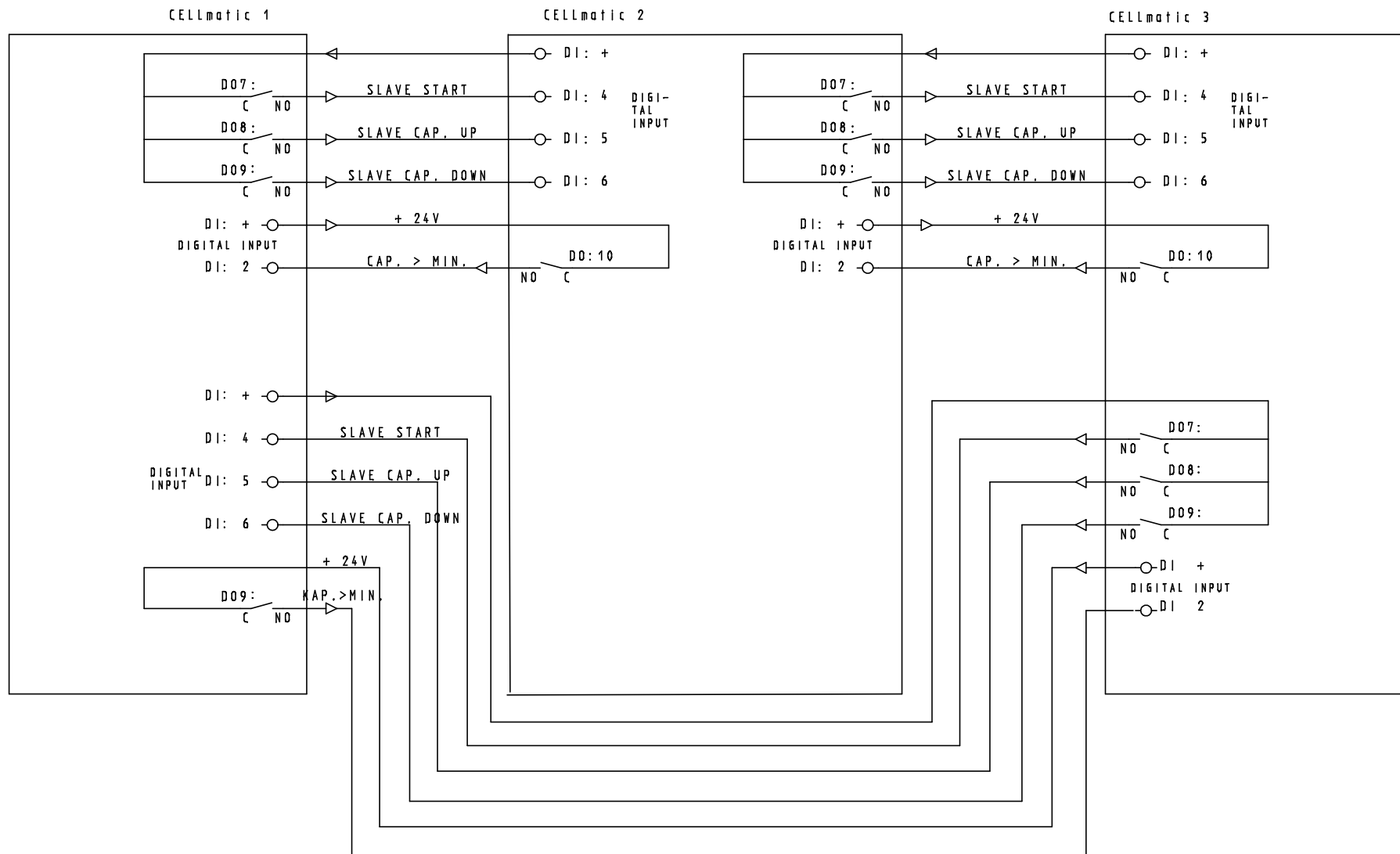
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MASTER/SLAVE/SLAVE CONNECTIONS
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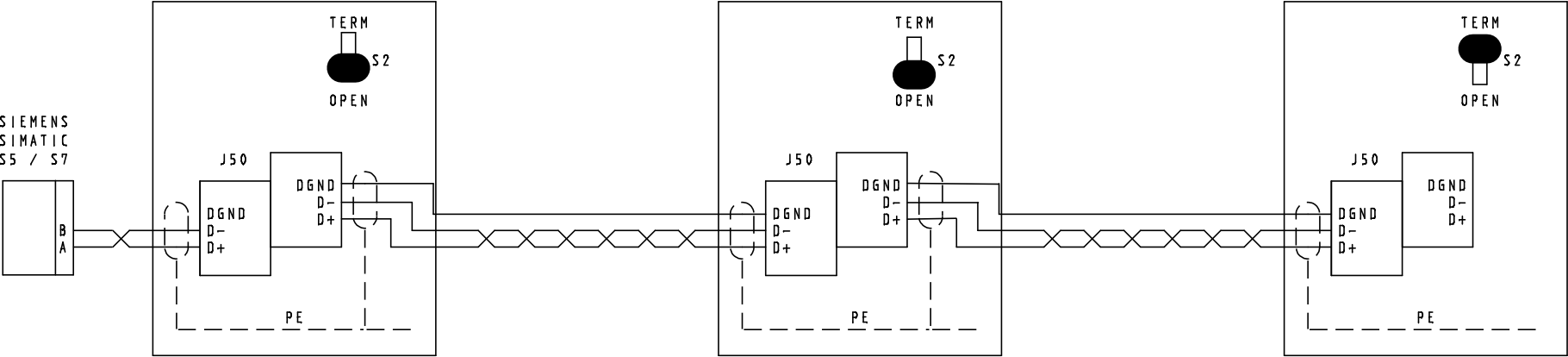
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MASTER/SLAVE CONNECTIONS
WITH PROFI CELL 566 CARD

CELLmatic 1 REMARK 1

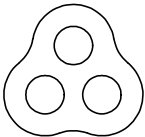
CELLmatic 2

CELLmatic 3



4x0.5mm_2 TWISTED PAIR WITH SHIELD
S2 MUST BE IN POSITION "TERM" IN BOTH ENDS

REMARK 1
S2 MUST BE IN POSITION "TERM" FOR CELLmatic 1
IF A SIEMENS PLC IS NOT CONNECTED



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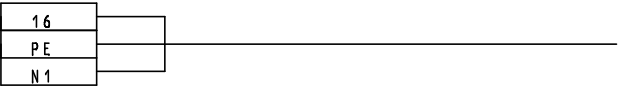
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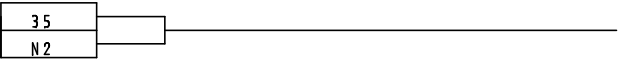
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ALL CABLES SHIELDED													
	1	2	3	4	5	6	7	8	9	10	11	12	

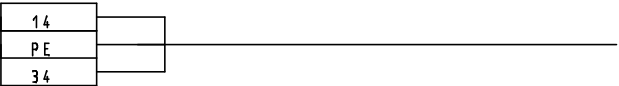
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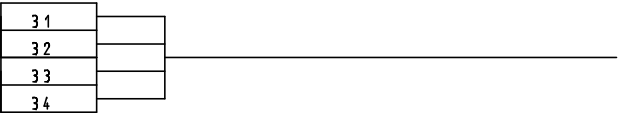
230V AC, 10A, L1 + N + PE
SUPPLY TO COMPUTER



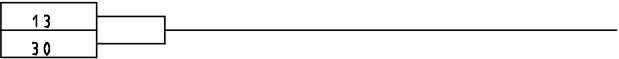
EXTERNAL SUPPLY (24-200VAC) TO SOLENOID VALVES
WHEN COILS DIFFER FROM 230VAC. TRAF0 250VA. SEE PAGE 5



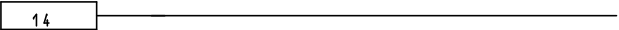
PRESSURE SWITCH
CAN BE CONNECTED HERE



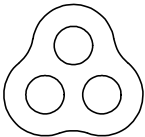
-3S9 EMERGENCYSTOP
MOUNTED FROM CELL. SEE PAGE 17



ONLY TO BE USED WHEN AN
EMERGENCYSTOPRELAY IS USED IN MAINPANEL. SEE PAGE 18



CONTROL VOLTAGE FROM MAIN PANEL
FOR OUT 12,13,14. SEE PAGE 17



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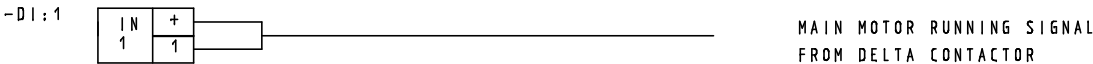
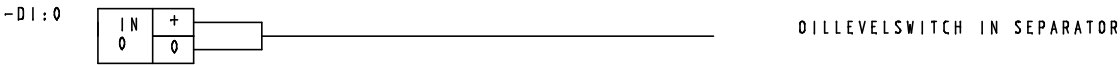
Revised		Order no.		Project			Caddy no.	
Index	Date	00395		SCREWCOMPRESSOR			00395	
PH	00.02.1999	Prep.		CELLmatic 1502			Plant	Drawing no.
		Date	07.06.1999				020	69 451 0000
		Contr.					Plac.	Page
				CABLE DIAGRAM			+P1	020

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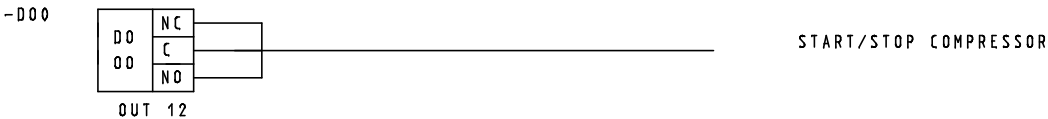
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ALL CONNECTIONS ARE DIRECTLY CONNECTED TO TERMINALS ON PRINT

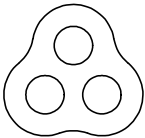
DIGITAL INPUT



DIGITAL OUTPUT



ANALOG INPUT

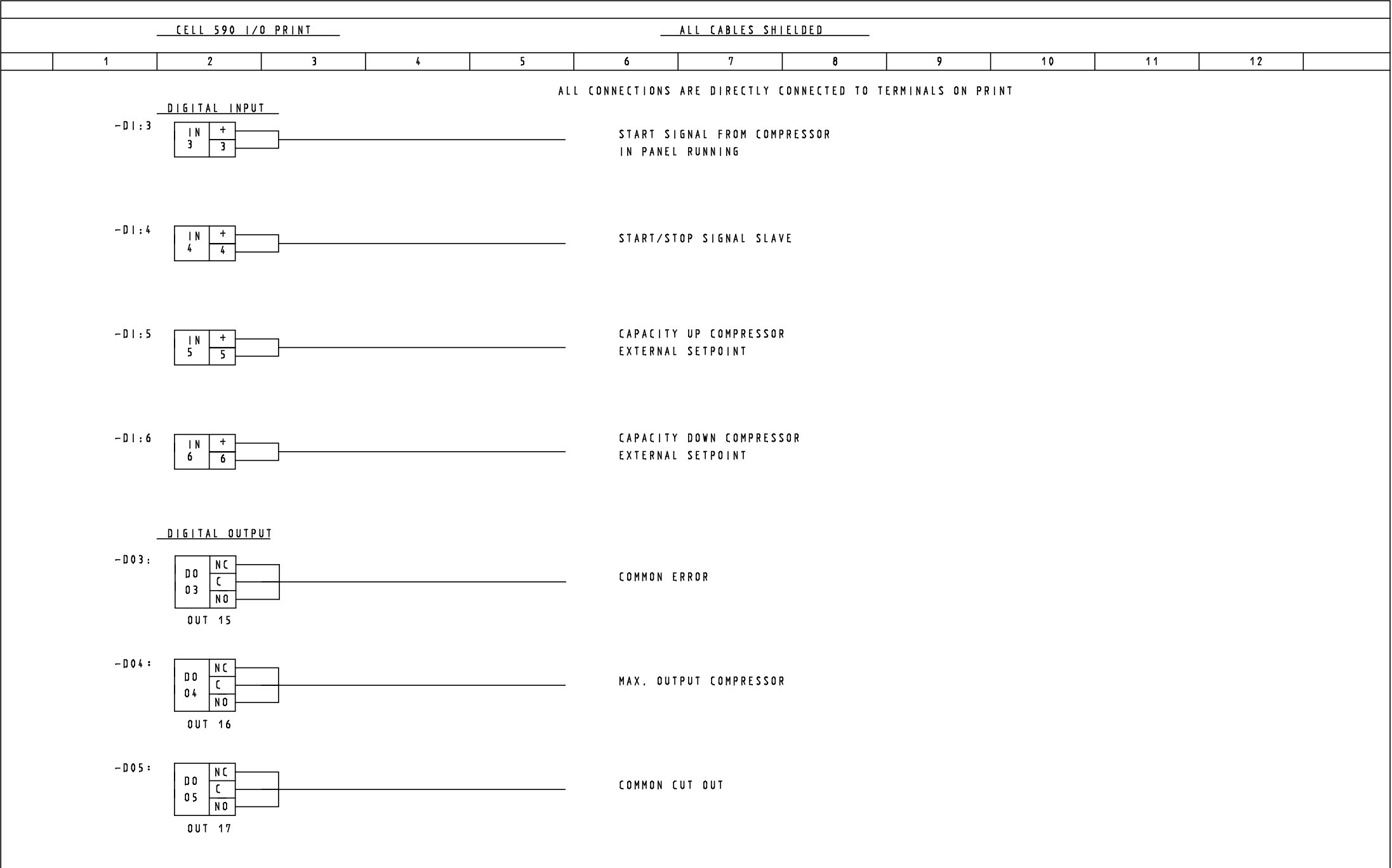


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		Contr.				Plac.	Page
				WIRING DIAGRAM		+P1	21



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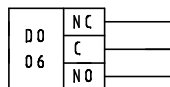
11

12

ALL CONNECTIONS ARE DIRECTLY CONNECTED TO TERMINALS ON PRINT

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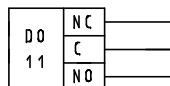
-D06:



OUT 18

BOOSTER START

-D011:

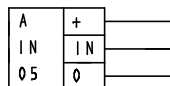


OUT 23

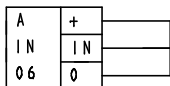
COMPRESSOR START READY

ANALOG INPUT

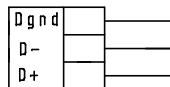
-A15:

BRINETEMPERATURE OUTLET
TRANSMITTER -50C TO +50C / 4-20mA

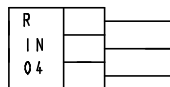
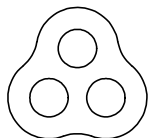
-A16:

BRINETEMPERATURE INLET
TRANSMITTER -50C TO +50C / 4-20mABUS COMMUNICATION

-J50:

SINEC L2 NETWORK
TWISTED 4 X 0.5 mm2 WITH SHIELDANALOG INPUT AS DIGITAL SIGNAL

-R1:4

CHANGE BETWEEN 2 SETPOINTS
SEE PAGE 11CELLmatic Aps
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Order no.

Project

SCREWCOMPRESSOR

CELLmatic 1502

WIRING DIAGRAM

Caddy no.

00395

Plant

=A1

Plac.

+P1

Drawing no.

69 451 0001

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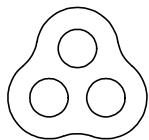
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	1	2	3	4	5	6	7	8	9	10	11	12	

Position	Designation	Type no.	Manufacture	Order no.

-3E4.1	CELL 1502 ,bottom		CELL A/S	69 387 0004 00
-3E4.2	CELL 1502, lid, incl. cable		CELL A/S	69 387 0003 00
-3E5	Foil		CELL A/S	69 395 0001 00
-3S9	Body for emergencystop 1NC	ZB2-BZ102	Telemecanique	45 423 0242 00
-3S9	emergencystop with key	ZB2-BS944	Telemecanique	45 423 2211 00
-3S9	Add contactblock NC	ZB2-BE102	Telemecanique	45 423 0252 00
-4E1	CELL 502 CPU		CELL A/S	41 286 5086 00
-4E3	CELL 380 Diode print		CELL A/S	69 750 0380 00
-4E7	CELL 590 I/O print		CELL A/S	41 286 5590 00
-4E6.1	CELL 574 Keyboard print		CELL A/S	41 286 5574 00
-4E6.2	CELL 579 LDC Display		CELL A/S	41 286 5579 00
-4T3	Transformer 220/24VAC 50 VA		CELL A/S	69 336 0000 00
-4E5.1	CELL 566 Communication card		CELL A/S	41 286 5101 00
-11E5	Kit setp. 1/2		CELL A/S	77 257 7019 00
-4W1.1	Cableset to CELL 380, Triac outputs		CELL A/S	69 603 0020 02
-4W1.2	Cableset to CELL 380, Multicable		CELL A/S	69 603 0020 03
-4W4	Cableset to CELL 380, Netcable		CELL A/S	69 603 0020 04
-4W10	Cableset to CELL 380, EM.cable		CELL A/S	69 603 0020 05
-4W5	Flatcable CELL 574 - CELL502		CELL A/S	69 301 0010 00
-4W3	Cable for diode print		CELL A/S	69 750 0380 00
-4W5.2	Profibus cabel to cell 566		CELL A/S	69 603 0031 00



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				COMPONENT LIST		+P1	24

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