

N° FOGLIO	DESCRIZIONE	GRUPPO	MODIFICHE																	
			0	1	2	3	4	5	6	7	8									
01	cover page		0	1	2															
02	INDICE		0	1																
03	legend		0																	
04	technical characteristics		0																	
05	overall dimensions		0	1																
06	list of labels		0	1																
07	dst 4400 front		0	1																
08	dst 4400 rear		0	1																
09	power circuits		0																	
10	diesel auxiliary services		0	1	2															
11	starting and stopping circuits		0																	
12	dst 4400 interconnection circuits		0		2															
13	dst 4400 interconnection circuits		0																	
14	electronic speed governor		0	1																
15	X5 terminal to generator set		0	1																
16	X6 terminal to remote signal		0	1																
17	XR terminal for services feeding		0	1																
18	material list		0		2															

0	05-06-2008		
1	31-10-2008 G.S.		
2	24-11-2008		
REV.	DATA	FIRMA	MODIFICA

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GARIBOLDI s.n.c.
20099 Sesto San Giovanni - Milano - ITALY
 Via D.Manin, 350/15 e-mail : gariboldisnc@libero.it

DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	index
DIS.:	garibaldi m.
DATA:	05/06/2008

FOGLIO	02
DI	18
	01 ◀▶ 03

SYMBOL	DESCRIPTION
	POWER AUTOMATIC CIRCUIT BREAKER
	MOULDED CASE AUTOMATIC CIRCUIT BREAKER
	FUSE HOLDER
	INSULATOR SWITCH
	AUXILIARY RELAY WITH FILTER
	N.O. CONTACT AUXILIARY RELAY
	N.C. CONTACT AUXILIARY RELAY
	CONTACTOR
	SELECTOR SWITCH
	N.O. CONTACT LEVEL SWITCH
	N.C. CONTACT LEVEL SWITCH
	N.C. CONTACT PRESSURE SWITCH
	N.O. CONTACT TEMPERATURE SWITCH

SYMBOL	DESCRIPTION
	EMERGENCY PUSH BUTTON
	N.O. CONTACT THERMAL SWITCH
	PILOT LIGHT
	TERMINAL BOARD
	RESISTANCE
	VARIABLE RESISTANCE
	KEY CONTROL
	MECHANICAL LOCK
	BATTERY
	CONNECTION POINT
	GROUND CONNECTION
	GENERATOR SET

SIMBOLO	DESCRIZIONE
	DIAGRAM REFERENCES
	CURRENT TRANSFORMER
	ELECTRIC VALVE
	ELECTRIC PUMP
	PICK-UP
	ACTUATOR
	BATTERY CHARGER
	GENERATOR SET MICROPROCESSOR CONTROL
	STARTING MOTOR
	ALTERNATOR BATTERY CHARGER
	TWISTED CABLES
	SHIELDED CABLES

0	05-06-2008		
REV.	DATA	FIRMA	MODIFICA

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DISEGNO: dwg/2008/041 COMMESSA: CTM job 6609 TITOLO: legend	FOGLIO 03 DI 18
DIS.: gariboldi m.	DATA: 05/06/2008

BOARD TYPE	ANS
STANDARDS OF REFEREMENT	IEC EN 60439-1

SERVICES CONDITIONS

ALTITUDE	<1000m s.l.m.
RELATIVE HUMIDITY	<95%
AMBIENT AIR TEMPERATURE	-5/+40°C

CONSTRUCTIONAL CHARACTERISTICS

PROTECTION DEGREE	IP42
INTERNAL SEGREGATION	IP20
EXTERNAL PAINTING	RAL 7032
THICKNESS PAINTING	>70 MICRON
MATERIAL LABELS	PVC
WRITING/BOTTOM	BLACK/WHITE
LEANGUAGE	ENGLISH

ELECTRICAL CHARACTERISTICS

RATED INSULATION VOLTAGE	690V
RATE OPERATION VOLTAGE	400V
RATED FREQUENCY	50HZ
RATED SHORT-TIME CURRENT	15KA
RATED CURRENT	100A
BATTERY VOLTAGE	12V

CABLES CHARACTERISTICS

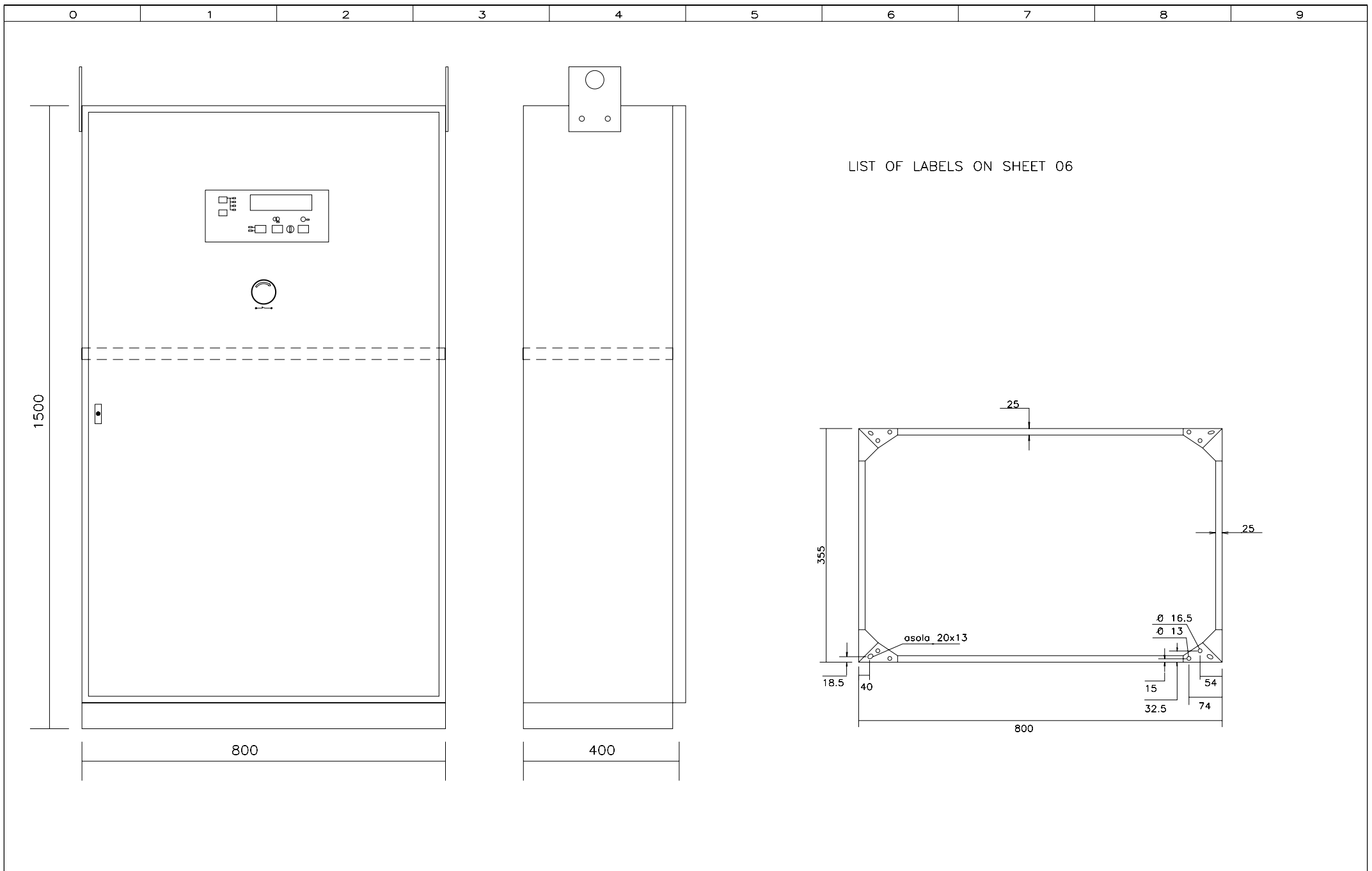
POWER CABLE S INLET	BOTTOM SIDE
POWER CABLES OUTLET	BOTTOM SIDE
INLET/OUTLET AUX.GEN.SET CABLES	BOTTOM SIDE
INLET/OUTLET AUX.CLIENT CABLE	BOTTOM SIDE
BUS BARS DIMENSION
CURRENT CIRCUITS SECTION	2.5sqmm
AUXILIARY CIRCUITS MIN.SECTION	1.5sqmm
TERMINAL BOARD MIN.SECTION	4sqmm
CABLES REFERENCE STANDARDS	IEC 20-22/20-37

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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	tecnicl characteristics
DIS.:	gariboldi m.
DATA:	05/06/2008



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C.T.M. motori

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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	overall dimensions
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO	05
DI	18
04◀▶06	

0	1	2	3	4	5	6	7	8	9

0	05-06-2008		
1	30-10-2008 G.S.		
REV.	DATA	FIRMA	MODIFICA

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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	SPARE
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO 06
DI 18
05◀▶07



REV.	DATA	FIRMA	MODIFICA
0	05-06-2008		

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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	dst 4400 front
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO	07
DI	18
06◀▶08	



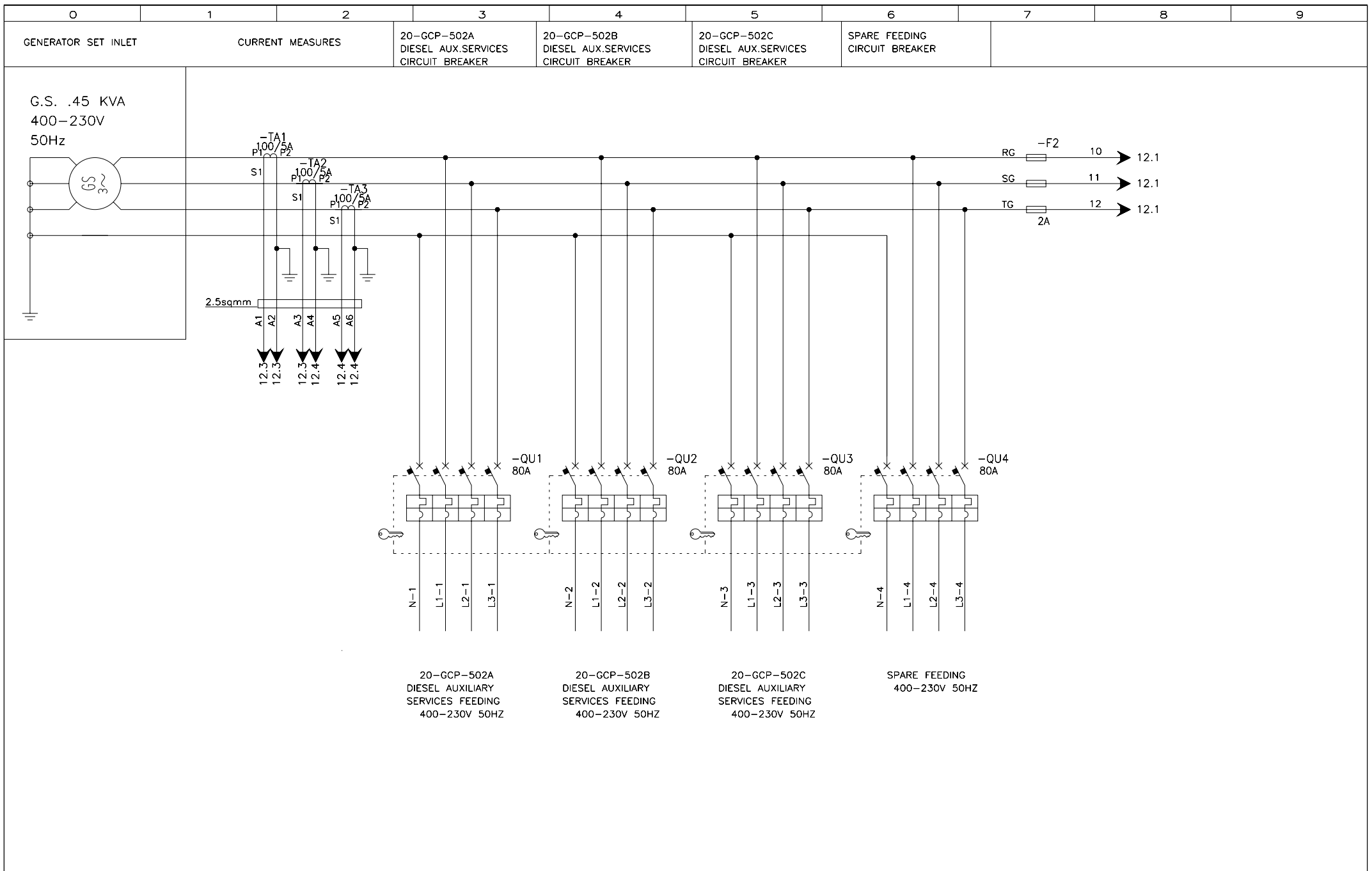
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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	dst 4400 rear
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO 08
 DI 18
 07◀▶09



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1	31-10-2008	G.S.	
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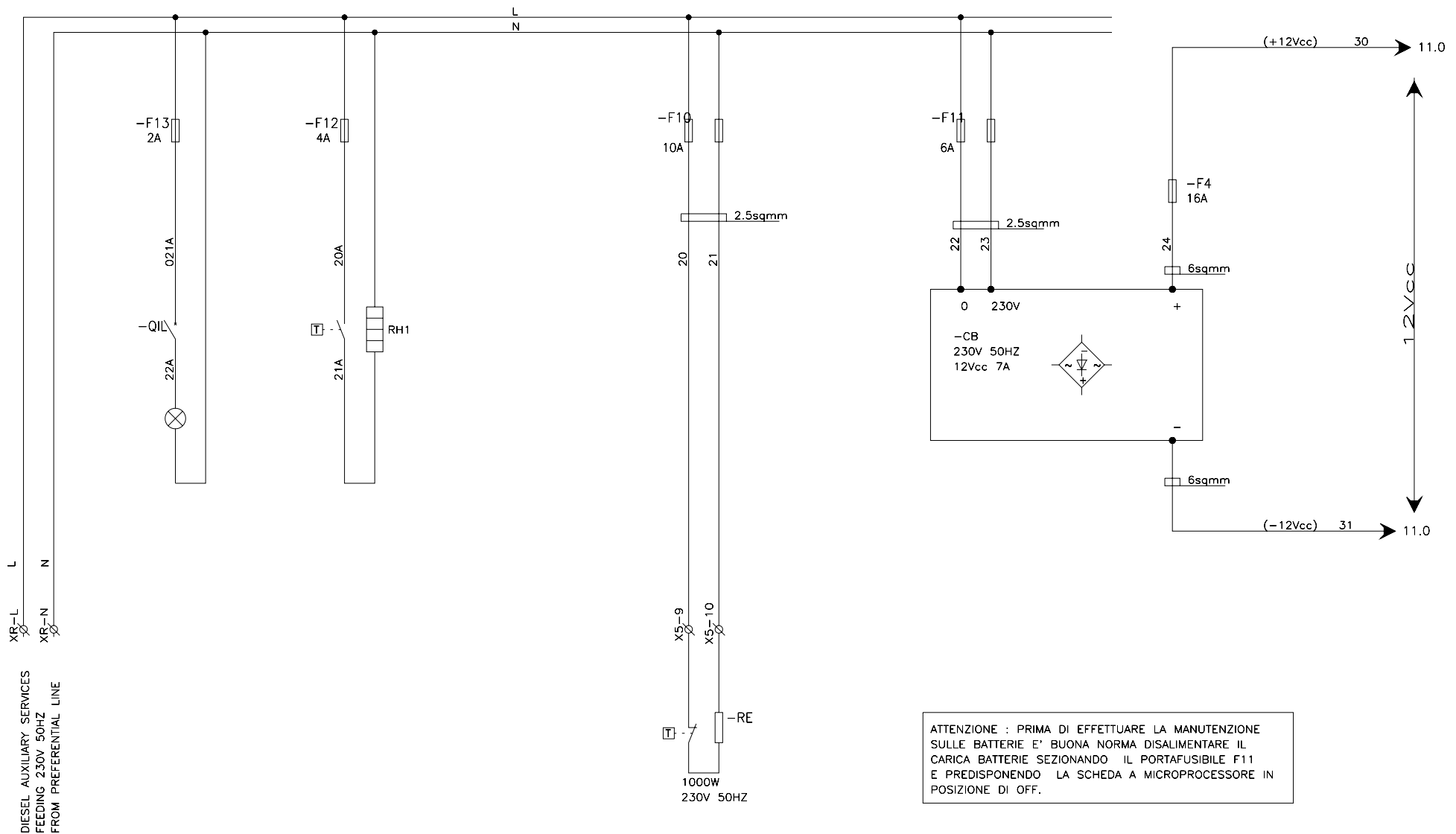
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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	power circuits
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO	09
DI	18
08 ◀▶ 10	

0	1	2	3	4	5	6	7	8	9
	INTERNAL CANOPY LIGHTNING	ELECTRIC BOARD SPACE HEATHER		ENGINE PREHEATING FEEDING		BATTERY CHARGER FEEDING			



ATTENZIONE : PRIMA DI EFFETTUARE LA MANUTENZIONE SULLE BATTERIE E' BUONA NORMA DISALIMENTARE IL CARICA BATTERIE SEZIONANDO IL PORTAFUSIBILE F11 E PREDISPONENDO LA SCHEDA A MICROPROCESSORE IN POSIZIONE DI OFF.

REV.	DATA	FIRMA	MODIFICA
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1	31-10-2008 G.S.		
2	24-11-2008		

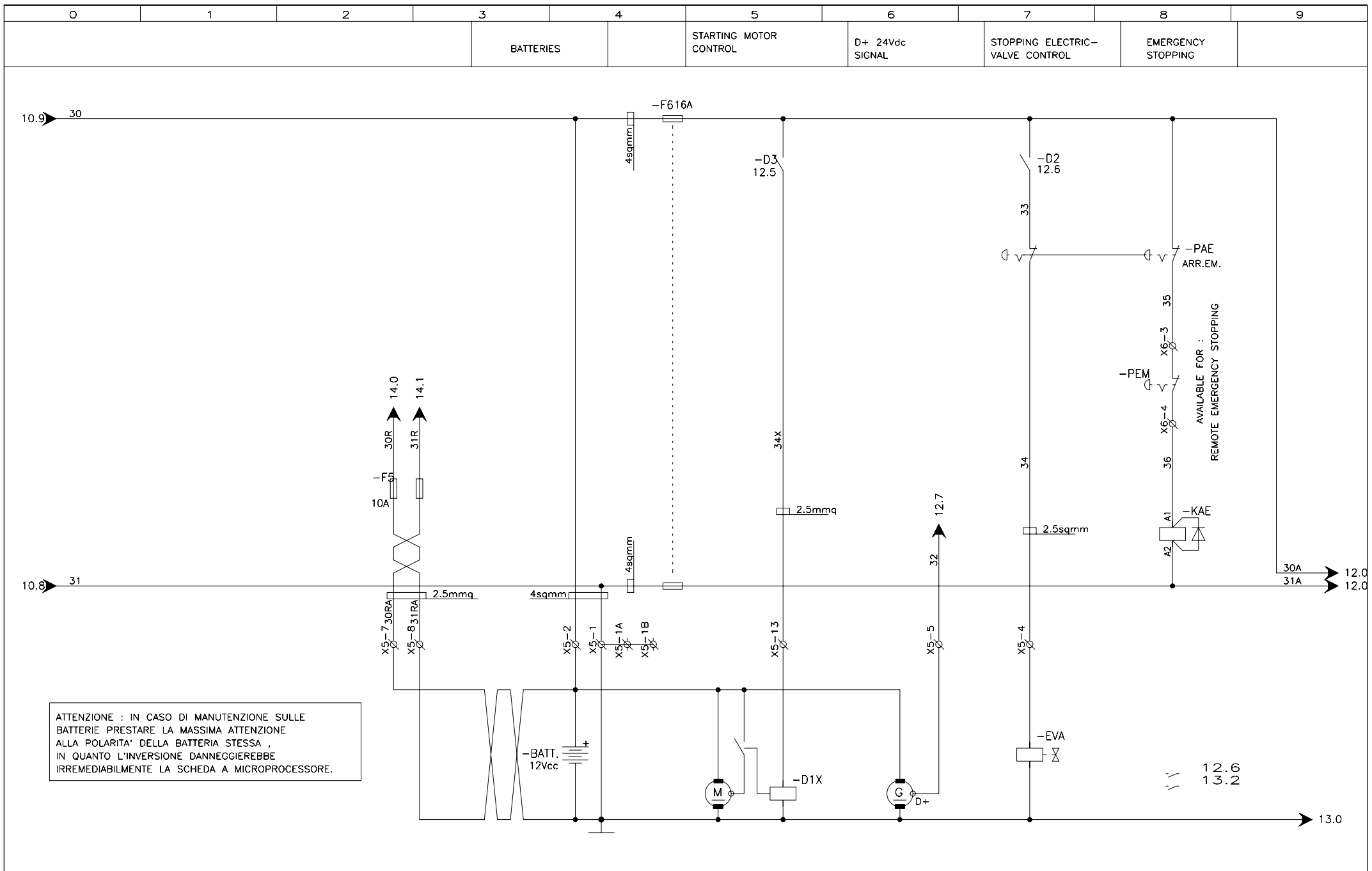
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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	diesel auxiliary services
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO	10
DI	18
09 ◀▶ 11	



ATTENZIONE : IN CASO DI MANUTENZIONE SULLE BATTERIE PRESTARE LA MASSIMA ATTENZIONE ALLA POLARITA' DELLA BATTERIA STESSA, IN QUANTO L'INVERSIONE DANNEGGIEREBBE IRREMIEDIABILMENTE LA SCHEDA A MICROPROCESSORE.

0	05-06-2008		
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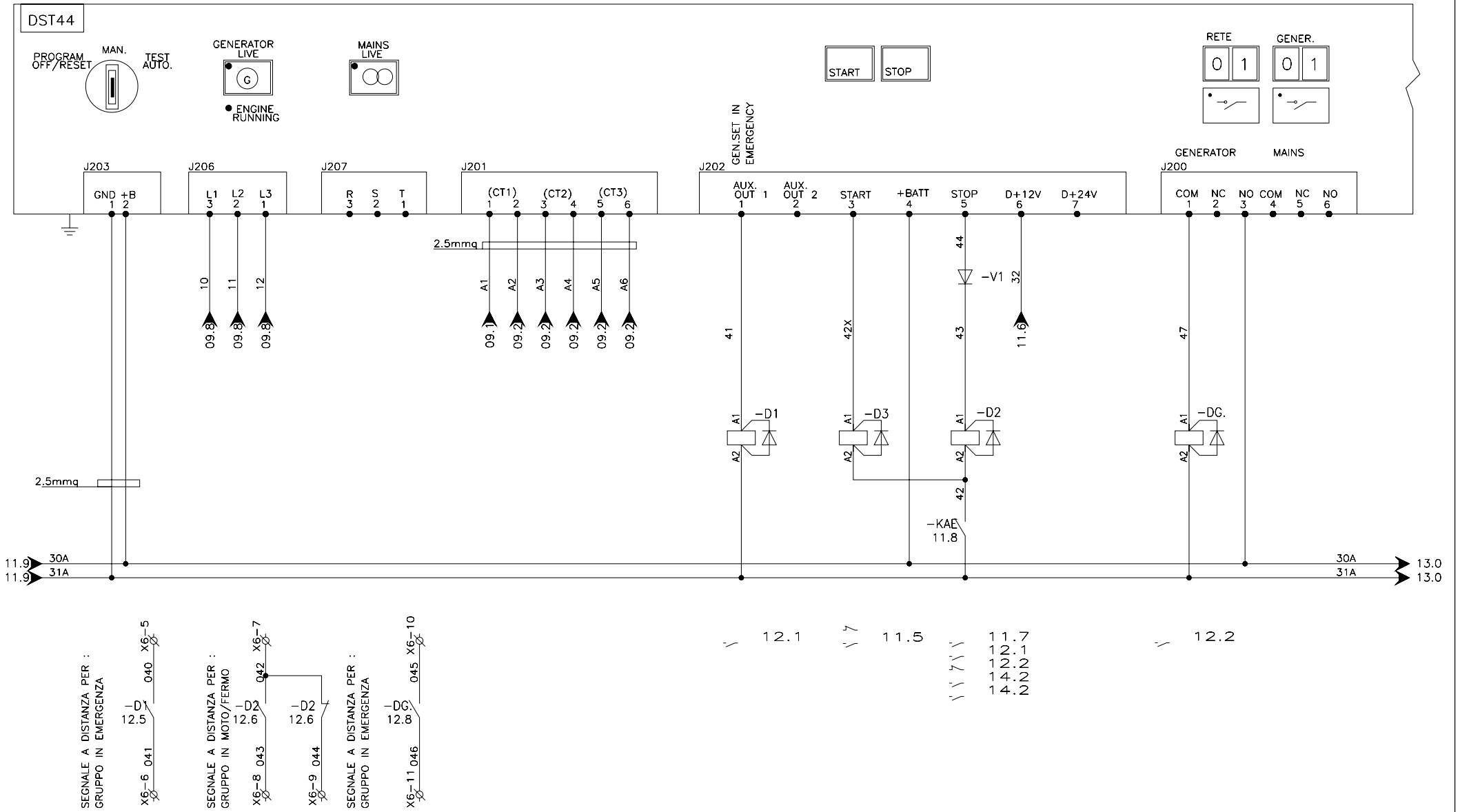
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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	starting and stopping circuits
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO	11
DI	18
10 ◀▶ 12	

0	1	2	3	4	5	6	7	8	9
STARTING SELECTOR SYSTEM FEEDING	VOLTAGE REFERENCES GENERATOR SET----MAIN		CURRENT REFERENCES		STARTING/STOPPING CONTROL CIRCUITS			SWITCHING CONTROL<CIRCUITS	



0	05-06-2008		
2	24-11-2008		
REV.	DATA	FIRMA	MODIFICA

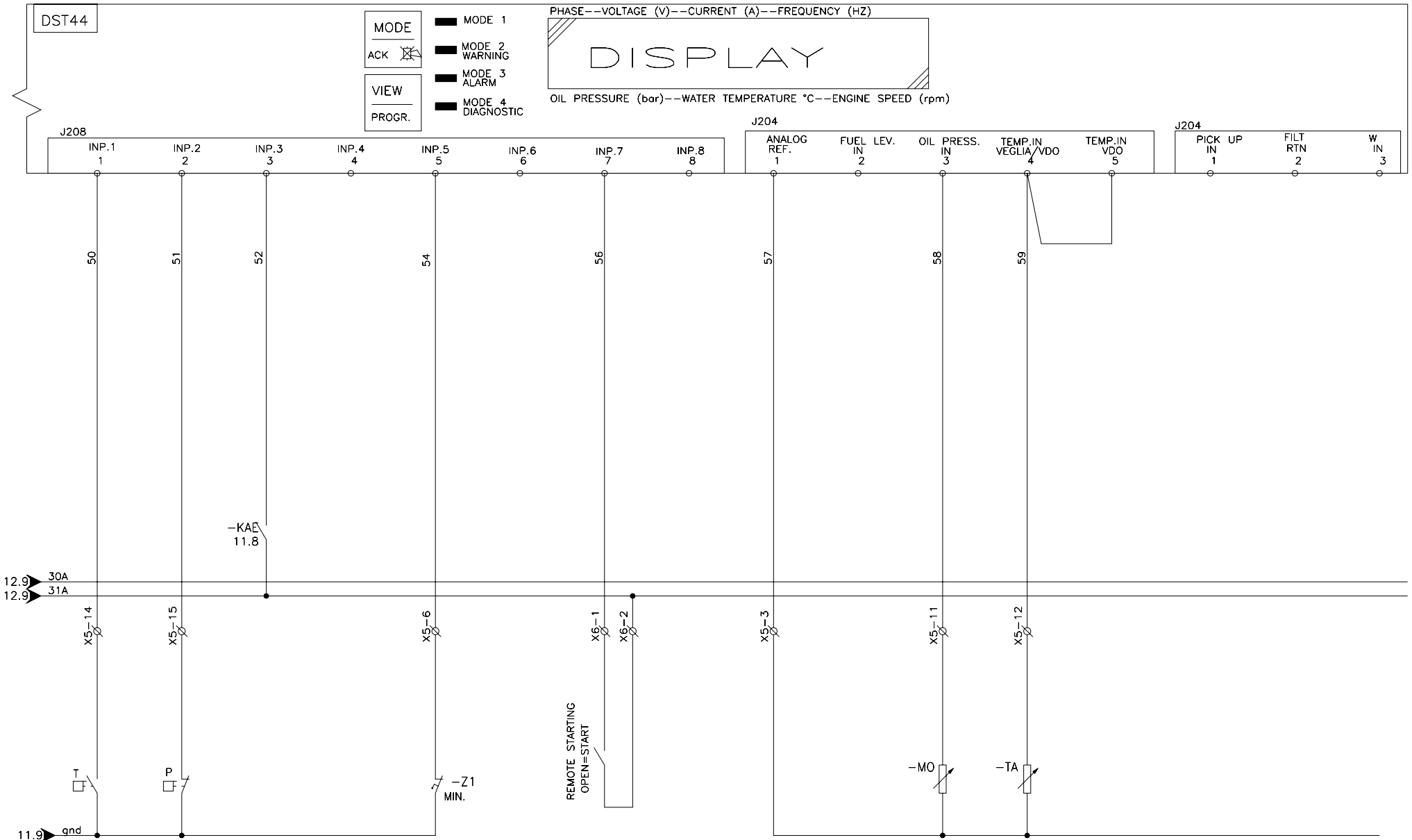
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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	dst 4400 interconnection circuits
DIS.:	gariboldi m.
DATA:	05/06/2008

FOGLIO	12
DI	18
11 ◀▶ 13	

0	1	2	3	4	5	6	7	8	9
	MAX. WATER TEMPERAT.	MIN. OIL PRESSURE	EMERGENCY STOPPING	MIN. FUEL LEVEL	REMOTE STARTING			OIL PRESSURE LOW OIL PRESSURE	WATER TEMPERAT. HIGH WATER TEMPERAT



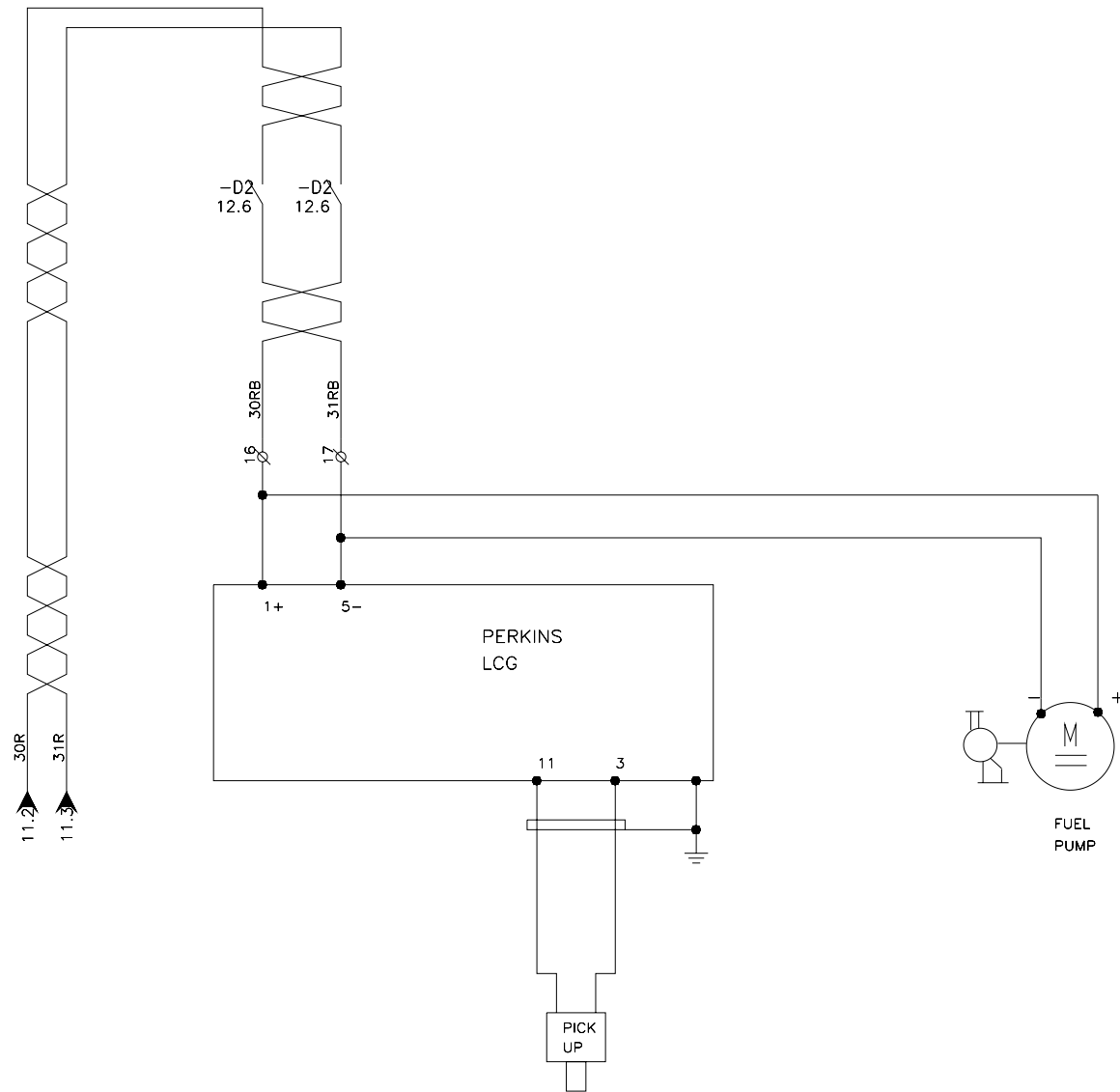
0	05-06-2008		
REV.	DATA	FIRMA	MODIFICA

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DISEGNO: dwg/2008/041 COMMESSA: CTM job 6609 TITOLO: dst 4400 interconnection circuits	FOGLIO 13 DI 18
DIS.: gariboldi m.	DATA: 05/06/2008

SPEED GOVERNOR CONTROL CIRCUITS



REV.	DATA	MODIFICA
0	05-06-2008	
1	31-10-2008 G.S.	

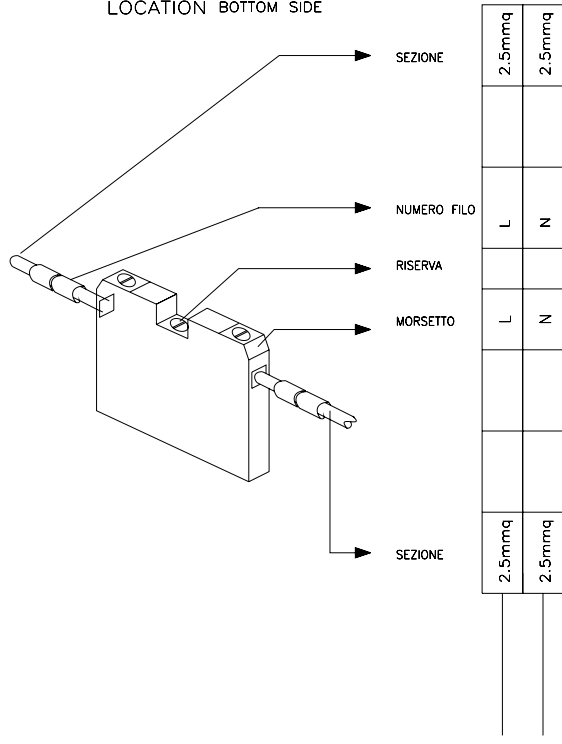
C.T. Meccanica
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DISEGNO:	dwg/2008/041
COMMESSA:	CTM job 6609
TITOLO:	electronic speed governor
DIS.:	gariboldi m.
DATA:	05/06/2008

TERMINAL BOARD -XR

LOCATION BOTTOM SIDE



DIESEL AUXILIARY SERVICES
FEEDING 230V 50HZ

REV.	DATA	FIRMA	MODIFICA
0	05-06-2008		
1	31-10-2008	G.S.	

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DISEGNO: dwg/2008/041	FOGLIO 17
COMMESSA: CTM job 6609	DI 18
TITOLO: XR terminal for services feeding	
DIS.: gariboldi m.	DATA: 05/06/2008

POSIT.	ABBR.	DESCRIPTION	MANUFACTURER	TYPE
10-6	CB	BATTERY CHARGER	GARIBOLDI	CBVN12/7 12VCC 7A 230V 50HZ
12-5	D1	AUXILIARY RELAY	FEME	RMIA45/12
12-6	D2	AUXILIARY RELAY	LOVATO	11BG0031D012 + 11BGX1011
12-5	D3	AUXILIARY RELAY	LOVATO	11BG0031D012
14-2	D4	AUXILIARY RELAY	FEME	RMIA45/12
14-3	D5	AUXILIARY RELAY	FEME	RMIA45/12
11-8	KAE	AUXILIARY RELAY	FEME	RMIA45/12
12-8	DG	AUXILIARY RELAY	FEME	RMIA45/12
09-7	F2	FUSE	ITALWEBER	BCH3X38 2A
10-7	F4	FUSE	ITALWEBER	BCH1X38 16A
11-2	F5	FUSE	ITALWEBER	BCH2X38 16A
11-4	F6	FUSE	ITALWEBER	BCH1X38 16A
10-4	F10	FUSE	ITALWEBER	BCH2X38 10A
10-6	F11	FUSE	ITALWEBER	BCH2X38 6A
10-2	F12	FUSE	MERLIN GERIN	STI-10,3x38 MULTI9
10-1	F13	FUSE	MERLIN GERIN	STI-10,3x38 MULTI9
12-0	DST44	MICROPROCESSOR SYSTEM	SICES	DST4400 12Vcc 400V 50HZ /5A
11-8	PAE	EMERGENCY PUSH BUTTON	ABB ELETTRONCONDUTTURE	KZ 0569
10-1	QIL	CIRCUIT BREAKER	GEWISS	
09-2	QU1	AUTOMATIC CIRCUIT BREAKER	ABB SACE	T1B 4x80A
09-4	QU2	AUTOMATIC CIRCUIT BREAKER	ABB SACE	T1B 4x80A
09-5	QU3	AUTOMATIC CIRCUIT BREAKER	ABB SACE	T1B 4x80A
09-6	QU4	AUTOMATIC CIRCUIT BREAKER	ABB SACE	T1B 4x80A
09-1	TA1	CURRENT TRANSFORMER	IME	TAI 233 100/5A
09-1	TA2	CURRENT TRANSFORMER	IME	TAI 233 100/5A
09-2	TA3	CURRENT TRANSFORMER	IME	TAI 233 100/5A
12-6	V1	DIODE	ITT	1N4007
14-1	REG	SPEED GOVERNOR	WOODWARD	

0	05-06-2008		
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DISEGNO:	dwg/2008/041	FOGLIO	18
COMMESSA:	CTM job 6609	DI	18
TITOLO:	material list		
DIS.:	gariboldi m.	DATA:	05/06/2008