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| | | | | | | | | | |
|--|---|---|---|--|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| QUADRO ELETTRICO / CONTROL BOX / COFFRET ELECTRIQUE SCHALTTAFEL / CUADRO DE MANDO / QUADRO ELÉCTRICO SÄHKÖTALU / SCHAKELKAST | | | | TIPO / TYPE / TYP / TYYPPI QDR2/03-110 | | | | | |
| ATTENZIONI: Protezione generale della linea a cura del cliente Collegare a terra il PE | | | | | | | | | |
| CAUTIONS: Power line protections to be supplied by user PE must be earthed | | | | | | | | | |
| ATTENTION: Protection générale de la ligne au traitement du client Le PE doit être mis à la terre | | | | | | | | | |
| ACHTUNG: Leitungsschutz muß kundenseitig hergestellt werden PE muß geerdet werden | | | | | | | | | |
| ATENCIÓN: Protección general de la línea a cargo del cliente Conectar a tierra el PE | | | | | | | | | |
| ATENÇÃO: Protecção general da linha por conta do cliente Ligar à terra o PE | | | | | | | | | |
| VAROITUSI: Asiakkaan tulee huolehtia verkon yleissuojauksesta Liiä PE maadoititteen | | | | | | | | | |
| LET OPI: Beveiliging van de hoofdleiding moet door de klant verzorgd worden PE moet geaard worden | | | | | | | | | |
| DATI TECNICI / RATING DATA / CARACTERISTIQUES TECHNIQUE/TECHNISCHEDATEN DATOS TÉCNICOS / DADOS TÉCNICOS/TEKNISET TIEDOT / TECHNISCHE GEGEVENS | | | | | | | | | |
| Potenza / Power / Puissance / Leistung / Potencia / Potência / Teho/Vermogen | | | | P = 0.37÷11kW | | | | | |
| Tensione/Voltage/Tension/Spannung/Tensão/Jännite/Spinning | | | | U = 400V | | | | | |
| Frequenza/Frequency/Frequence/Frequenz/Frecuencia/Frequência/Frequenție | | | | f = 50/60Hz | | | | | |
| Corrente/Current/Courant/Ström/Corriente/Corrente/Virta/Stroom | | | | I _n = tab. A | | | | | |
| Corrente ammissibile di breve durata/Short-time withstand current/Courant de courte durée | | | | I _{w 1s} = 500A | | | | | |
| Nennkurzstrom/Corriente admisible de corta duraci on/Corriente admisivél de breve duraç ão | | | | I _{w 1s} = 500A | | | | | |
| Salittu lyhytaikainen virta/toegestane kortstondige stroom | | | | I _{w 1s} = 500A | | | | | |
| Corrente di picco limitata/Peak withstand current/Courant de crete admissible /Nennstofsstrom | | | | I _{pk} = 10kA | | | | | |
| Corriente nominal de choque/Corriente de pico limitada/Rajoleittu huippuvirta/Beperkte piekstrom | | | | I _{pk} = 10kA | | | | | |
| Corrente di corto circuito/Short-circuit current/Courant de court-circuit /Kurzschlussstrom | | | | I _{sc} = 6.5kA | | | | | |
| Corriente de corto circuito/Corriente de curto-circuito/Oikosulkuvirta/Kortslutstrom | | | | I _{sc} = 6.5kA | | | | | |
| Corriente de protecci on/Grau de protec ção/Suoja-aste/Beschermingsgrad | | | | <input type="checkbox"/> IP54 <input type="checkbox"/> IP55 <input type="checkbox"/> IP... | | | | | |
| CAVO / CABLE / KABEL / CABO / KAAPELI | | | | | | | | | |
| Potenza / Power / Puissance / Leistung / Potencia / Potência / Teho / Vermogen | | | | BK H07 V-K | | | | | |
| Condotore di neutro / Neutral conductor / Conducuteur neutre | | | | BU H07 V-K | | | | | |
| Nullleiter / Conductor de neutro / Nollajohdin / Nulgleider | | | | BU H07 V-K | | | | | |
| Ausiliari / Auxiliary / Auxiliaire / Hilfsstromkreis / Auxiliares / Apuvirta / Hulpgeleiders | | | | RD H05 V-K | | | | | |
| Condotore di protezione / Protective conductor / Conducuteur de protection | | | | GNVE H07 V-K | | | | | |
| Schutzleiter / Conductor de proteccion / Conductor de protecção / Suojajohdin | | | | GNVE H07 V-K | | | | | |
| Beveiligingsgeleider | | | | GNVE H07 V-K | | | | | |
| Condotore di interconnessione / Interconnection conductor | | | | OG H05 V-K | | | | | |
| Conducuteur d'interconnexion / Verbindung Leiter / Conductor da interconexão | | | | OG H05 V-K | | | | | |
| Conductor de la interconexión / De leider van de interconnectie | | | | OG H05 V-K | | | | | |



Draw. N. **QDR2001D0** REV. **A**
 CAD **SPAC** ECN: **12/045**
 File Name QDR2001D0.dwg
 Date 24/02/2012

Tab. A

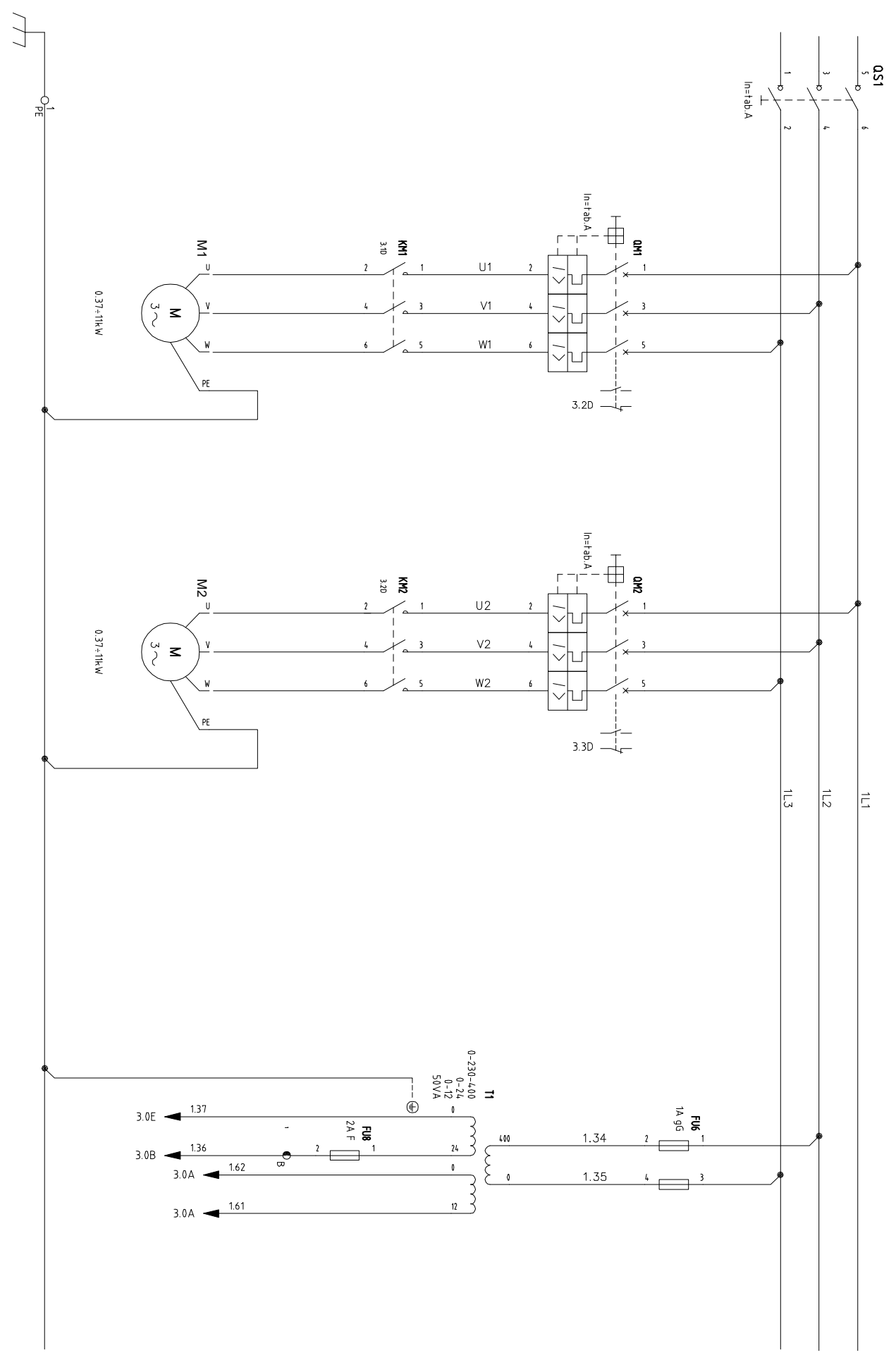
| QUADRO ELETTRICO CONTROL BOX COFFRET ELECTRIQUE SCHALTTAFEL SCHAKELKAST CUADRO DE MANDO QUADRO ELÉCTRICO | POTENZA POWER PUISSANCE LEISTUNG VERMAGEN POTENCIA POTÊNCIA | I _n | GS1 | QM1-2 | KM1-2 | PE |
|--|---|----------------|--------|----------|--------|-------|
| (kW) | (A) | In (A) | In (A) | In (A) | In (A) | (mm²) |
| QDR2/05 | 0.37-0.55 | 3.2A | 25A | 1-1.6A | 11 | 4 |
| QDR2/07 | 0.75 | 5A | 25A | 1.6-2.5A | 11 | 4 |
| QDR2/15 | 1.1-1.5 | 8A | 25A | 2.5-4A | 11 | 4 |
| QDR2/22 | 2.2 | 13A | 25A | 4-6.3A | 11 | 4 |
| QDR2/40 | 3-4 | 20A | 25A | 6.3-10A | 12 | 4 |
| QDR2/75 | 5.5-7.5 | 32A | 63A | 10-16A | 16 | 4 |
| QDR2/92 | 9.2 | 40A | 63A | 16-20A | 25 | 6 |
| QDR2/110 | 11 | 50A | 80A | 20-25A | 25 | 10 |

QUADRO ELETTRICOPOMPE DRENAGGIO TRIFASE
THREE-PHASE DRAINAGE MOTOR PUMPS CONTROL PANEL

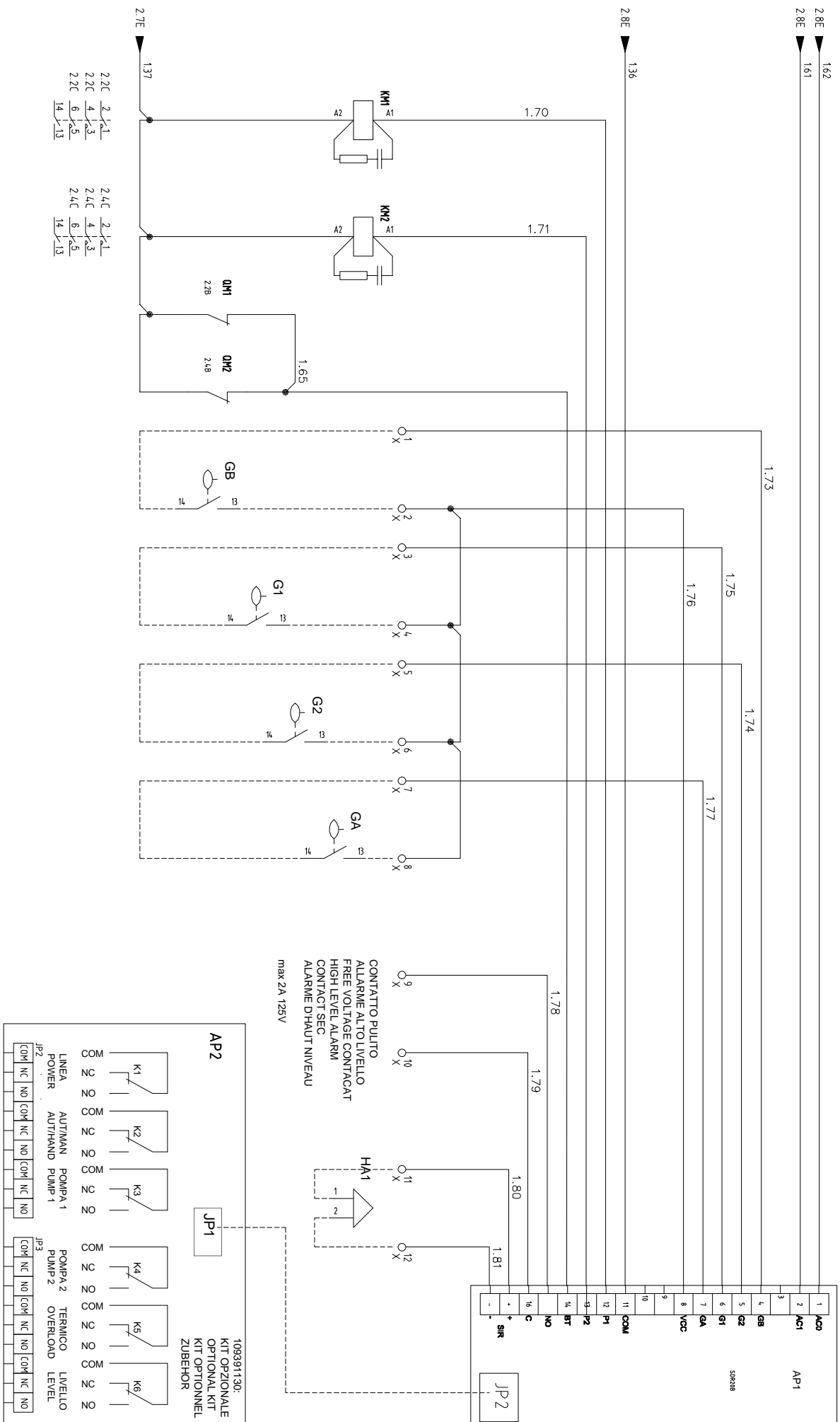
| REV. | ECN | MODIFICATION / DESCRIPTION | DATE | DRAW | CHECK / APPR. |
|------|--------|----------------------------|------------|------|---------------|
| A | 12/045 | PRIMA EMISSIONE | 24/02/2012 | A.D. | A.C./A.V. |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Plant **QDR2/03-110**
 Denomination **DATI PROGETTO**
PROJECT DATA
 DRAW **A.D.** REPLACES **QDR2001B0** REV **B** SHEET **1**
 CHECKED **A.C.** APPROVED **A.V.** NEXT **2**

0 1 2 3 4 5 6 7 8 9



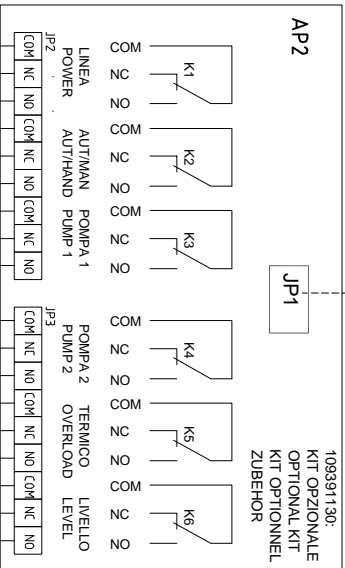
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|---------------------------------|--------------------|--------------|---|----------|------------------------|-------|
| Draw: N. QDR2001D0 | REV: A | Plant | QDR2/03-110 | DRAW | REPLACED | SHEET |
| CAD: SPAC | EON: 12/045 | | | | | |
| File Name: QDR2001D0.dwg | | Denomination | CIRCUITI DI POTENZA POWER CIRCUITS | CHECKED | REPLACES | NEXT |
| Date: 24/02/2012 | | | | A.C. | QDR2001B0 REV B | 3 |
| | | | | APPROVED | | |



| | | | |
|------|-------|------|-------|
| 2.2C | 2.2A1 | 2.4C | 2.4A1 |
| 2.2C | 4.3 | 2.4C | 4.3 |
| 2.2C | 6.5 | 2.4C | 6.5 |
| 14 | 13 | 14 | 13 |



| | | | | | | |
|-----------|------------------|--------------|--|----------|-----------------|-------|
| Draw. N. | QDR2001D0 | Plant | QDR2/03-110 | DRAW | REPLACED | SHEET |
| CAD | SPAC | REV. A | EON: 12/045 | | CHECKED | 3 |
| File Name | QDR2001D0.dwg | Denomination | CIRCUITI AUSILIARI AUXILIARY CIRCUITS | A.C. | QDR2001B0 REV B | NEXT |
| Date | 24/02/2012 | | | APPROVED | | 4 |



CONTATTO PULITO
 ALLARME AUTO LIVELLO
 FREE VOLTAGE CONTACT
 HIGH LEVEL ALARM
 CONTACT SEC
 ALARME D'HAUT NIVEAU
 max 2A 125V

| Q.TA. Q.TE MENG AANT. CAD. Q.DE | DESCRIZIONE DESCRIPTION BESCHREIBUNG AANT. DESCRIPCION DESCRICAÇÃO | COSTRUTTORE MANUFACTURER CONSTRUCTEUR HERSTELLER AANNEEMER CONSTRUCTOR CONSTRUTOR | TIPO TYPE TYPE TYP TIPO | LOWARA CODE | DATI TECNICI RATING DATA CARACT. TECHNIQUE TECHNISCHENDATEN TECHNISCHE GEGEVENS DATOS TECNICOS DADOS TECNICOS |
|--|---|---|---|--|---|
| QSI 1 | INTERRUTTORE PRINCIPALE MAIN SWITCH INTERRUPTEUR GENERAL HAUPTSCHALTER HOOFDSCHAKELAAR INTERRUPTOR PRINCIPAL INTERRUPTOR GERAL | ABB | OT25F3 OT40F3 OT63F3 OT80F3 | 002842950 002842951 002842952 002842953 | le=25A (20 AC23-A) le=40A (23 AC23-A) le=63A (45 AC23-A) le=80A (75 AC23-A) U=750V |
| KM1-2 2 | CONTACTTORE CONTACTOR CONTACTEUR SCHULTZ CONTACTSLUITER CONTACTOR KONTAKTORI | ABB | B7-30-10 A12-30-10 AF1-2-30-10 A16-30-10 AF1-6-30-10 A26-30-10 AF26-30-00 | 002823413 002823402 002823403 002823404 | le=11A le=12A le=16A le=25A U=24V~ f=50/60Hz |
| FU6 FUS 1 | PORTA FUSIBILE / FUSE HOLDER PORTE FUSIBLES SICHERUNGSSCHALTER ZEKERINGHOUDER PORTA FUSIVEL / SULAKEKOTILO | ITALWEBER CABUR | BCH 2x38 5X20 | 002856449 | 32A 660V 6.3A 250V |
| FU6 FUS 2 | FUSIBILE / FUSE / FUSIBLE SICHERUNG / ZEKERING FUSIVEL / SULAKE | ITALWEBER | 1A gG | 002856449 | GH10 U=500V Ih=100kA |
| FUS 1 | FUSIBILE / FUSE / FUSIBLE SICHERUNG / ZEKERING FUSIVEL / SULAKE | ITALWEBER | Fus 5x20F sid 2A | 002856433 | U=250V |
| T1 1 | TRASFORMATORE MONOFASE SINGLE-PHASE TRANSFORMER TRANSFORMATEUR MONOPHASE EINPHASENTRANSFORMATOR MONOFASE TRANSFORMATOR TRANSFORMADOR MONOFASICO TRANSFORMADOR MONOFASICO YKSIVAIHEMUNTLAJA | TECNOCABLAGGI | | 002831203 | S=50VA U1=0-230-400V U2=0-120-24V Classe F |

| Q.TA. Q.TE MENG AANT. CAD. Q.DE MÄÄRÄ | DESCRIZIONE DESCRIPTION BESCHREIBUNG AANT. DESCRIPCION DESCRICAÇÃO | COSTRUTTORE MANUFACTURER CONSTRUCTEUR HERSTELLER AANNEEMER CONSTRUCTOR CONSTRUTOR VALMISTAJA | TIPO TYPE TYPE TYP TIPO TYPPI | LOWARA CODE | DATI TECNICI RATING DATA CARACT. TECHNIQUE TECHNISCHENDATEN TECHNISCHE GEGEVENS DATOS TECNICOS DADOS TECNICOS TEKNISET TIEDOT |
|---|--|---|--|---|--|
| QM1-2 1 | INTERRUTTORE AUT. SALVAMOTORE AUTOMATIC OVERLOAD CUT-OUT DISJONCTEUR MAGNETOTHERMIQUE MOTORSchUTZSCHALTER MOTORSchUTZSCHALTER MOTOR MOTOR INTERRUPTOR PROTECTOR DE MOTOR INTERRUPTOR PROTECTOR DO MOTOR | ABB | MS116-1-6 MS116-2-5 MS116-4 MS116-6-3 MS116-10 MS116-16 MS132-20 MS132-25 MS132-25 MS325-25 | 002843293 002843294 002843295 002843296 002843297 002843298 002843299 | 1-1.6A 1.6-2.5A 2.5-4A 4-6.3A 6.3-10A 10-16A 16-20A 20-25A |
| AP1 AP2 1 | SCHEDA ELETTRONICA ELECTRONICS CARD CARTE ELECTRONIQUE ELEKTRONISCHEN PLATINE ELEKTRONISCHE KAART TARJETA ELECTRONICA PLACA ELECTRONICA PIIRIKORTTI | LOWARA | SDR20B RIL S20 | 150890341 109391130 | 12V/ac/dc 12V/dc |
| X1-12 B1 5 | MORSETTO TERMINAL KLEME KLEMMEN BORNE BORNE BORNE LITINI | CABUR | DAS4 CBD2 | | 4mm² |
| PE 1 | MORSETTO DI TERRA EARTHING TERMINAL BORNE DE TERRE ERDUNGSKLEMME AARDKLEEM BORNE DE TIERRA BORNE DE TERRE | CABUR | TE#40 | | 4mm² |

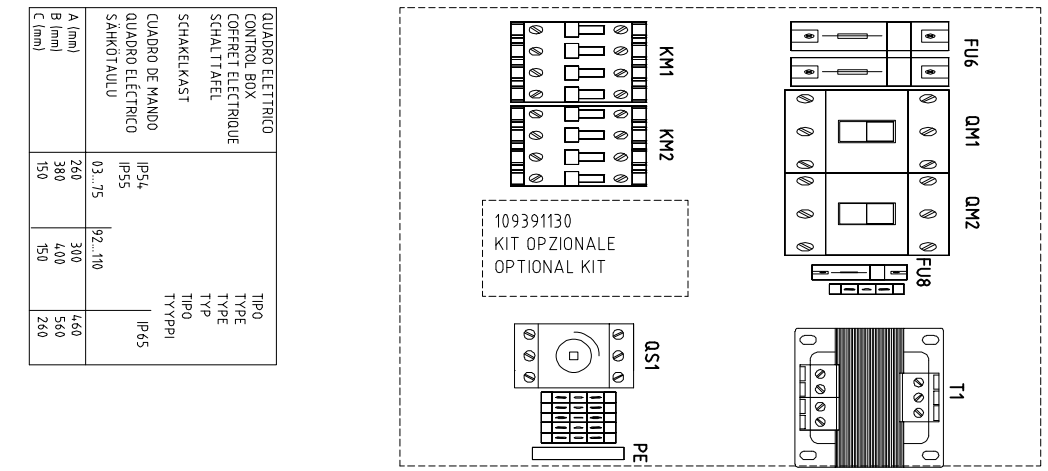
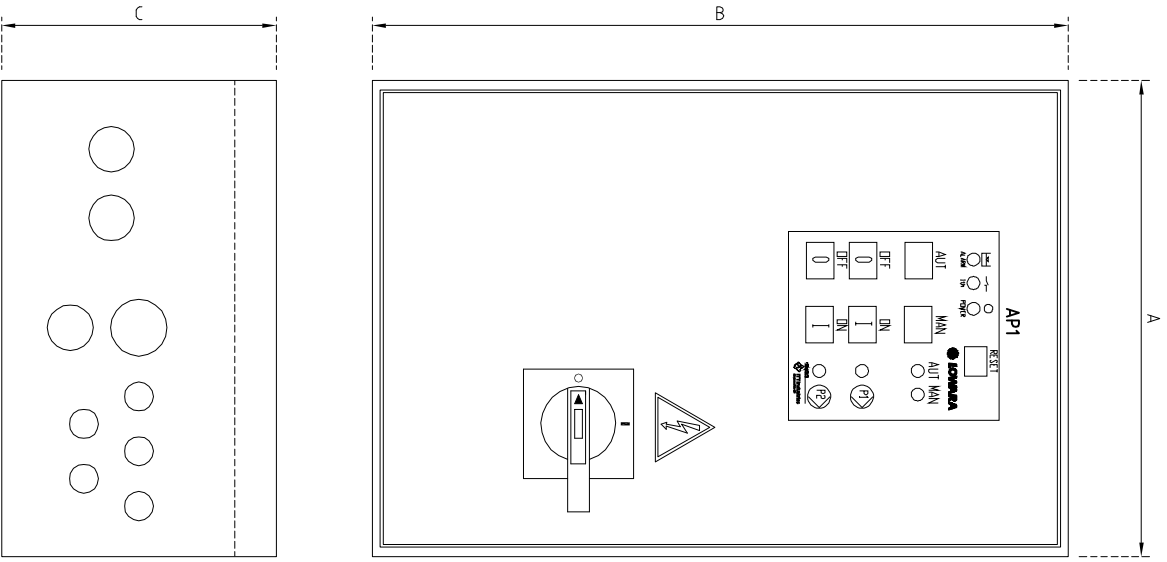
Draw. N. **QDR2001D0** REV. **A**
 CAD **SPAC** EN: **12/045**
 File Name QDR2001D0.dwg
 Date 24/02/2012

Plant **QDR2/03-110**
 Denomination **LISTA COMPONENTI
SPARE PARTS**

| | | |
|----------|-----------|----------|
| DRAW | REPLACED | SHEET |
| A.D. | | 4 |
| CHECKED | | |
| A.C. | QDR2001B0 | REPLACES |
| APPROVED | REV B | NEXT |
| A.V. | | 5 |



0 1 2 3 4 5 6 7 8 9



| | | | |
|--|------------------------|-------------------|--------------------------------------|
| QUADRO ELETTRICO CONTROL BOX COPRETT ELECTRIQUE SCHALT TAFEL SCHAKELKAST QUADRO DE MANDO QUADRO ELECTRICO SÄHKÖTALU | 03..75 IP54 IP55 | 92..110 | IP65 |
| A (mm) B (mm) C (mm) | 260 380 150 | 300 400 150 | 460 560 260 |
| | | | TIPO TYPE TYP TIPO TYPPI |



Draw. N. **QDR2001D0**
 CAD **SPAC**
 File Name QDR2001D0.dwg
 Date 24/02/2012

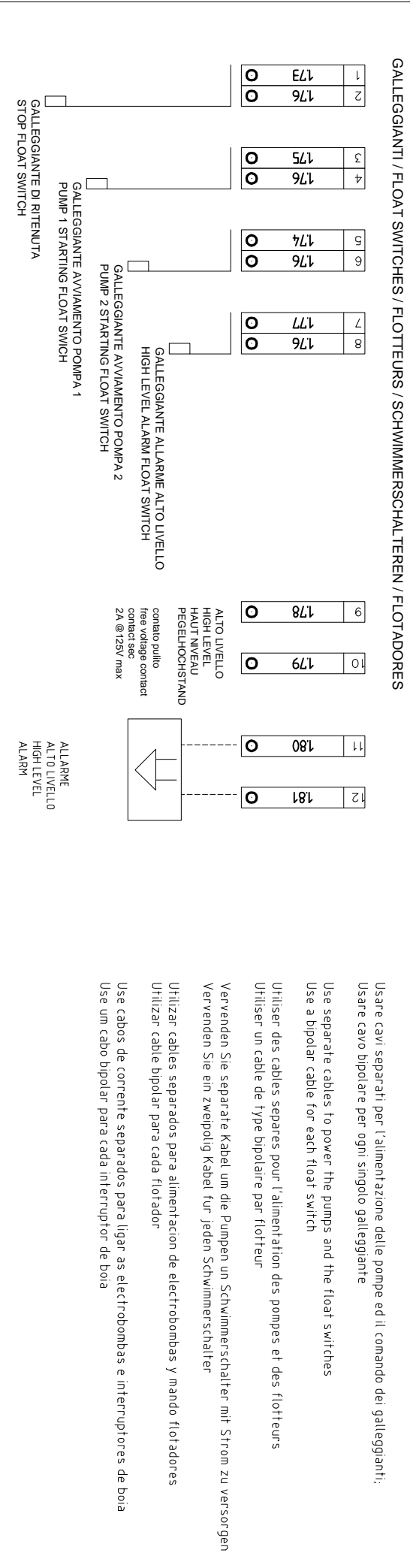
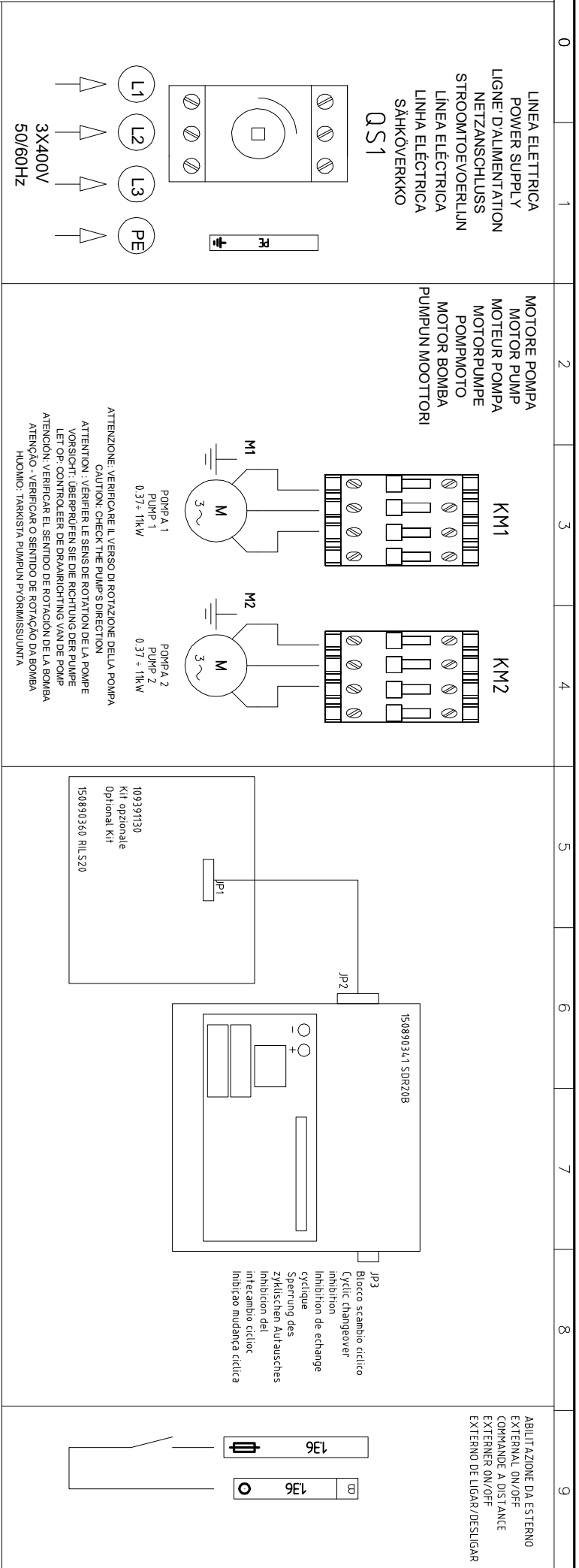
REV. **A**
 ECN: **12/045**

Plant **QDR2/03-110**
 Denomination **DISIGNO MECCANICO
 MECHANICAL DRAWING**

DRAW A.D. **REPLACES**
 CHECKED A.C. **QDR2001B0 REV B**
 APPROVED A.V.

SHEET **5**
 NEXT **6**

SCALAS



Usare cavi separati per l'alimentazione delle pompe ed il comando dei galleggianti;
 Usare cavo bipolare per ogni singolo galleggiante

Use separate cables to power the pumps and the float switches
 Use a bipolar cable for each float switch

Utiliser des cables separates pour l'alimentation des pompes et des flotteurs
 Utiliser un cable de type bipolaire par flotteur

Verwenden Sie separate Kabel um die Pumpen un Schwimmerschalter mit Strom zu versorgen
 Verwenden Sie ein zweipolig Kabel für jeden Schwimmerschalter

Utilizar cables separados para alimentacion de electrobombas y mando flotadores
 Utilizar cable bipolar para cada flotador

Use cabos de corrente separados para ligar as electrobombas e interruptores de boia
 Use um cabo bipolar para cada interruptor de boia

LOWARA

| | | | | | | | | | |
|--------------------------------|------------------------|---|--------------------|--------------|---------|-----------------------|-------|------------------|-------------------|
| Draw. N. QDR2001D0 | REV. A | Plant | | | | | | | |
| CAD SPAC | ECN: 12/045 | Denomination MORSETTIERA TERMINAL BOARD | QDR2/03-110 | DRAW A.D. | CHECKED | REPLACES QDR2001B0 | REV B | APPROVED A.V. | SHEET 6 |
| File Name QDR2001D0.dwg | Date 24/02/2012 | | | | | | | | |