VARIAN

vacuum technologies

MiniLink Controller

Model 929-0300
Model 929-0301

(I) MANUALE DI ISTRUZIONI

(D) BEDIENUNGSHANDBUCH

(F) NOTICE DE MODE D'EMPLOI

(GB) INSTRUCTION MANUAL

87-900-054-01 (C)
APRIL 2006

MiniLink Controller

VARIAN

DICHIARAZIONE DI CONFORMITA'

Varian S.p.A. dichiara sotto la propria responsabilità che gli alimentatori per pompe da vuoto sputter-ioniche delle serie: 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, rispettano i requisiti indicati dalla direttiva compatibilità elettromagnetica 89/336/CEE e dalla direttiva bassa tensione 73/023/CEE. Si garantisce la conformità dei prodotti sopracitati alle seguenti norme:

EN-CENELEC 55011	Classe A gruppo 1 Limiti e metodi di misura delle caratteristiche di radiodisturbo degli apparecchi industriali.
IEC 1000-4-2 (ex 801-2)	Compatibilità elettromagnetica delle misure in processi industriali. Parte 2: requisiti delle scariche elettrostatiche
IEC 1000-4-3 (ex 801-3)	Compatibilità elettromagnetica delle misure in processi industriali. Parte 3: requisiti dei campi elettromagnetici irradiati.
IEC 1000-4-4 (ex 801-4)	Compatibilità elettromagnetica delle misure in processi industriali. Parte 4: requisiti dei transitori elettrici di breve durata/a guizzo.
EN 61010-1	Prescrizioni di sicurezza per apparecchi elettrici di misura, controllo e per utilizzo in laboratorio. Parte 1: Prescrizioni generali.

KONFORMITÄTSERKLÄRUNG

Die Firma Varian S.p.A. erklärt unter eigener Haftung, daß die Speisegeräte für Sputter-Ionenpumpen der Serien 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, den Anforderungen der Richtlinie für elektromagnetische Kompatibilität 89/336/EWG und der Richtlinie für Niederspannung 73/023/EWG entsprechen. Es wird die Übereinstimmung der oben genannten Produkte mit den folgenden Normen garantiert:

EN-CENELEC 55011	Klasse A Gruppe 1 Einschränkungen und Meßmethoden der Funkstörungsmerkmale von industriellen Geräten.
IEC 1000-4-2 (ex 801-2)	Elektromagnetische Kompatibilität der Messungen bei industriellen Prozessen. Teil 2: Anforderungen zu elektrostatischen Abladungen
IEC 1000-4-3 (ex 801-3)	Elektromagnetische Kompatibilitäs der Messungen bei industriellen Prozessen. Teil 3: Anforderungen zu elektromagnetisch bestrahlten Feldern.
IEC 1000-4-4 (ex 801-4)	Elektromagnetische Kompatibilität der Messungen bei industriellen Prozessen. Teil 4: Anforderungen zu Kurzzeit-/Spitzenströmen.
EN 61010-1	Sicherheitsvorschriften für elektrische Meß- und Kontrollgeräte sowie für Geräte für den Laborgebrauch. Teil 1: Allgemeine Vorschriften.

DECLARATION DE CONFORMITE

Varian S.p.A. déclare, sous sa propre responsabilité, que les alimentations pour pompes à vide sputter-ioniques des séries 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, respectent les conditions requises par la directive concernant la compatibilité électromagnétique 89/336/CEE et par la directive basse tension 73/023/CEE. On garantit que les produits indiqués ci-dessous sont conformes aux normes suivantes:

EN-CENELEC 55011	Classe A groupe 1 Limites et méthodes de mesure des caractéristiques d'interférence des appareils industriels.
IEC 1000-4-2 (ex 801-02)	Compatibilité électromagnétique des mesures dans des processus industriels. Partie 2: conditions requises des décharges électrostatiques.
IEC 1000-4-3 (ex 801-03)	Compatibilité électromagnétique des mesures dans des processus industriels. Partie 3: requises des champs électromagnétiques irradiés.
IEC 1000-4-3 (ex 801-03)	Compatibilité électromagnétique des mesures dans des processus industriels. Partie 4: conditions requises des transitoires électriques rapides/à éclatement.
EN 61010-1	Prescriptions de sécurité des appareils électriques de mesure, de contrôle et pour utilisation en laboratoire. 1ère partie: Prescriptions générales

DECLARACIÓN DE CONFORMIDAD

Varian S.p.A. declara bajo su responsabilidad que los alimentadores para bombas de vacío sputter-iónicas de las series: 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, respetan los requisitos indicados por la directiva sobre la compatibilidad electromagnética 89/336/CEE CEE y por la norma de baja tensión 73/023/CEE. Se garantiza la conformidad de los productos anteriormente citados con las normas siguientes:

EN-CENELEC 55011	Clase A grupo 1 Límites y métodos de medición de las características de radioperturbación de los aparatos industriales.
IEC 1000-4-2 (ex 801-2)	Compatibilidad electromagnética de las mediciones en procesos industriales. Parte 2: requisitos de las descargas electrostáticas.
IEC 1000-4-3 (ex 801-3)	Compatibilidad electromagnética de las mediciones en procesos industriales. Parte 3: requisitos de los campos electromagnéticos irradiados.
IEC 1000-4-4 (ex 801-4)	Compatibilidad electromagnética de las mediciones en procesos industriales. Parte 4: requisitos de los transitorios eléctricos de poca duración/de salto.
EN 61010-1	Prescripciones de seguridad para equipos eléctricos de medición, control y para uso en laboratorio. Parte 1: Prescripciones generales.

DECLARAÇÃO DE CONFORMIDADE

A Varian S.p.A. declara, sob sua responsabilidade, que os alimentadores para bombas de vácuo sputter-iónicas das séries 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, respeitam os requisitos indicados pela directriz de compatibilidade electromagnética 89/336/EEC e pela directriz de baixa tensão 73/023/CEE. Garante-se a conformidade dos produtos citados acima com as seguintes normas:

EN-CENELEC 55011	Classe A grupo 1 Limites e métodos de medição das características de interferência na rádio-recepção dos aparelhos industriais.
IEC 1000-4-2 (ex 801-2)	Compatibilidade electromagnética das medidas em processos industriais. Parte 2: requisitos das descargas electrostáticas.
IEC 1000-4-3 (ex 801-3)	Compatibilidade electromagnética das medidas em processos industriais. Parte 3: requisitos dos campos electromagnéticos irradiados.
IEC 1000-4-4 (ex 801-4)	Compatibilidade electromagnética das medidas em processos industriais. Parte 4: requisitos dos transistores eléctricos de breve duração/por deslize.
EN 61010-1	Prescrições de segurança para aparelhos eléctricos de medição, controlo e para a utilização em laboratório. Parte 1: Prescrições gerais

CONFORMITEITSVERKLARING

Varian S.p.A. verklaart onder eigen verantwoordelijkheid dat de voedingsinrichtingen voor verstuivingsionenvacuümpompen en vacuümpompen van de series 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, aan de veiligheidseisen aangegeven in de richtlijn elektrische compatibiliteit 89/336/EEG en de richtlijn laagspanning 73/023/EEG voldoen. Men garandeert de conformiteit van bovengenoemde produkten aan de volgende normen:

EN-CENELEC 55011	Klasse A groep 1 Grenswaarden en meetmethodes van radiostoringskenmerken van industriële apparatuur.
IEC 1000-4-2 (ex 801-2)	Elektromagnetische compatibiliteit voor metingen van industriële processen. Deel 2: Eisen voor elektrostatische ontladingen.
IEC 1000-4-3 (ex 801-3)	Elektromagnetische compatibiliteit voor metingen van industriële processen. Deel 3: Eisen voor uitgestraalde elektromagnetische velden.
IEC 10004-4 (ex 801-4)	Elektromagnetische compatibiliteit voor metingen van industriële processen. Deel 4: Eisen voor snelle elektrische transiënten/bursts.
EN 61010-1	Veiligheidsvoorschriften voor elektrische meet- en regelapparatuur en voor gebruik in laboratoria. Deel 1: Algemene voorschriften.

OVERENSSTEMMELSESERKLÆRING

Varian S.p.A erklærer på eget ansvar, at strømkilderne til vakuumpumper ved ionpulverisering og vakuumpumper i serien 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, opfylder de krav, der er opstillet i direktivet vedr. elektromagnetisk kompatibilitet 89/336/EØF og lavspændingsdirektivet 73/023/EØF. Producenten forsikrer, at ovenstående produkter er i overensstemmelse med følgende normer:

EN-CENELEC 55011	Klasse A, gruppe 1 Begrænsninger for og metoder til måling af radiostøj ved industriudstyr.
IEC 1000-4-2 (tidligere 801-2)	Elektromagnetisk kompatibilitet i forbindelse med måling ved industriprocesser. Del 2: krav til elektrostatiske udladninger.
IEC 1000-4-3 (tidligere 801-3)	Elektromagnetisk kompatibilitet i forbindelse med måling ved industriprocesser. Del 3: krav til udstrålede elektromagnetiske felter.
IEC 1000-4-4 (tidligere 801-4)	Elektromagnetisk kompatibilitet i forbindelse med måling ved industriprocesser. Del 4: krav til spændingsspidser.
EN 61010-1	Sikkerhedsforskrifter vedr. elektrisk måle-, kontrol- og laboratorieudstyr. Del 1: Generelle forskrifter.

OVERENSSTEMMELSESERKLÆRING

Varian S.p.A erklærer under eget ansvar at strømkildene til vakuumpumper ved avskyting og vakuumpumper i serien 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, oppfyller kravene i direktivet vedr. elektromagnetisk kompatibilitet 89/336/EØF og lavspenningsdirektivet 73/023/EØF. Produsenten forsikrer at ovenstående produkter er i overensstemmelse med følgende normer:

EN-CENELEC 55011	Klasse A, gruppe 1 Begrensinger og metoder for måling av radiostøy ved industriutstyr.
IEC 1000-4-2 (tidligere 801-2)	Elektromagnetisk kompatibilitet i forbindelse med måling ved industriprosesser. Del 2: krav til elektrostatiske nedladinger.
IEC 1000-4-3 (tidligere 801-3)	Elektromagnetisk kompatibilitet i forbindelse med måling ved industriprosesser. Del 3: krav til utstrålte elektromagnetiske felt.
IEC 1000-4-4 (tidligere 801-4)	Elektromagnetisk kompatibilitet i forbindelse med måling ved industriprosesser. Del 4: krav til spenningsspisser
EN 61010-1	Sikkerhetsforskrifter vedrørende elektrisk måle-, kontroll- og laboratorieutstyr Del 1: Generelle forskrifter.

FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

Varian S.p.A försäkrar på eget ansvar strömkällorna för vakuumpumpar med förstoftning och vakuumpumpar i serien 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, uppfyller de krav som omnämns i direktivet om elektromagnetisk kompatibilitet 89/336/EU samt lågspänningsdirektivet 73/023/EU. Tillverkaren garanterar ovan nämnda produkters överensstämmelse med följande normer:

EN-CENELEC 55011	Klass A, grupp 1 Gränser och metoder för mätning av radiostörningar hos industriutrustning.
IEC 1000-4-2 (f.d. 801-2)	Elektromagnetisk kompatibilitet i samband med mätning vid industriprocesser. Del 2: krav på elektrostatiska urladdningar.
IEC 1000-4-3 (f.d. 801-3)	Elektromagnetisk kompatibilitet i samband med mätning vid industriprocesser. Del 3: krav på utstrålade elektromagnetiska fält.
IEC 1000-4-4 (f.d. 801-4)	Elektromagnetisk kompatibilitet i samband med mätning vid industriprocesser. Del 4: krav på spänningsspetsar.
EN 61010-1	Säkerhetsföreskrifter för elektriska mät-, kontroll- och laboratorieinstrument. Del 1: Allmänna föreskrifter.

VAATIMUSTENMUKAISUUSVAKUUTUS

Varian S.p.A vakuuttaa, että sarjan 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, virtalähteet tyhjiöpumpuille ionipulveroinnilla vastaavat sähkömagneettista yhteensopivuutta koskevan direktiivin 89/336/EY ja pienjännitedirektiivin 73/023/EY vaatimuksia. Valmistaja takaa, että edellämainitut tuotteet ovat seuraavien vaatimusten ja normien mukaisia:

EN-CENELEC 55011	Luokka A, ryhmä 1 Tehdaslaitteiden ilmastohäiriöiden mittausmenetelmät ja -rajoitukset.
IEC 1000-4-2 (entinen 801-2)	Tehdaskäyttöisten mittauksien sähkömagneettisuuden yhteensopivuus. Osa 2: sähköstaattisten purkausten vaatimukset.
IEC 1000-4-3 (entinen 801-3)	Tehdaskäyttöisten mittauksien sähkömagneettisuuden yhteensopivuus. Osa 3: säteilyn sähkömagneettikentän vaatimukset.
IEC 1000-4-4 (entinen 801-4)	Tehdaskäyttöisten mittauksien sähkömagneettisuuden yhteensopivuus. Osa 4: jännitekärkien vaatimukset.
EN 61010-1	Mittaus-, ohjaus- ja laboratoriolaitteiden turvallisuusvaatimukset. Osa 1: Yleiset vaatimukset.

ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ

Η εταιρεία **Varian S.p.A.** δηλώνει, αναλαμβάνοντας πλήρη ευθύνη, ότι οι τροφοδότες για αντλίες κενού της σειράς 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014, 9296015, συμμορφώνονται με τις ουσιαστικές προϋποθέσεις ασφαλείας που αναφέρονται στην Οδηγία ηλεκτρομαγνητικής συμβατικότητας **89/336/CEE**. και στην οδηγία χαμηλής τάσης **73/023/CEE** Εγγυούμαστε τη συμμόρφωση των παραπάνω προϊόντων με τους ακόλουθους κανονισμούς

EN-CENELEC 55011	Κλάση Α ομάδα 1 Όρια και μέθοδοι μέτρησης των χαρακτηριστικών των ραδιοπαρασίτων των βιομηχανικών συσκευών
IEC 1000-4-2 (ex 801-2)	Ηλεκτρομαγνητική συμβατικότητα των μετρήσεων στις βιομηχανικέςδιαδικασίες. Μέρος **2**: προϋποθέσεις των ηλεκτροστατικών εκκενώσεων.
IEC 1000-4-3 (ex 801-3)	Ηλεκτρομαγνητική συμβατικότητα των μετρήσεων στις βιομηχανικές διαδικασίες. Μέρος **3**: προϋποθέσεις των εκπεμπομένων ηλεκτρομαγνητικών πεδίων.
IEC 1000-4-4 (ex 801-4)	Ηλεκτρομαγνητική συμβατικότητα των μετρήσεων στις βιομηχανικές διαδικασίες. Μέρος **4**: προϋποθέσεις των ηλεκτρικών μεταβάσεων μικρής διαρκείας και απότομων
EN 61010-1	Διατάξεις ασφαλείας για ηλεκτρικές συσκευές μέτρησης, ελέγχου και για χρήση σε εργαστήριο. Μέρος **1**: Γενικές διατάξεις

CONFORMITY CERTIFICATE

Varian S.p.A. declares under its own responsibility that the series 9290022, 9290023, 9290190, 9290191, 9290196, 9290197, 9290200, 9290201, 9290290, 9290291, 9290300, 9290301, 9212001, 9294040, 9294050, 9294100, 9294110, 9295000, 9295001, 9295002, 9295003, 9295004, 9295005, 9295006, 9295007, 9296000, 9296001, 9296002, 9296003, 9296004, 9296005, 9296006, 9296007, 9296008, 9296009, 9296010, 9296011, 9296012, 9296013, 9296014 and 9296015, sputter-ionic vacuum pump power supplies comply with the requirements of the electromagnetic compatibility Directive 89/336/EEC and by the low voltage Directive 73/023/EEC. It guarantees that the products listed above comply with the following standards:

EN-CENELEC 55011	Class A group 1 Limits and measuring methods for the radio-frequency interference characteristics of industrial equipment.
IEC 1000-4-2 (formerly 801-2)	Electromagnetic compatibility for industrial process measurement. Part 2: Electromagnetic discharge requirements.
IEC 1000-4-3 (formerly 801-3)	Electromagnetic compatibility for industrial process measurement. Part 3: Radiated electromagnetic field requirements.
IEC 1000-4-4 (formerly 801-4)	Electromagnetic compatibility for industrial process measurement. Part 4: Electrical fast transient/burst requirements.
EN 61010-1	Safety requirements for electrical equipment for measurement, control and laboratory use. Part 1: general requirements

Varian SpA
Via Varian 54, 10040 Leini- Torino (Italy)

20.10.1998

S. Pitta

Vice President and General Manager

VARIAN

vacuum technologies

Dear Customer,

Thank you for purchasing a VARIAN vacuum product. At VARIAN Vacuum Technologies we make every effort to ensure that you will be satisfied with the product and/or service you have purchased.

As part of our Continuous Improvement effort, we ask that you report to us any problem you may have had with the purchase or operation of our product. On the back side you find a Corrective Action Request form that you may fill out in the first part and return to us.

This form is intended to supplement normal lines of communications and to resolve problems that existing systems are not addressing in an adequate or timely manner.

Upon receipt of your Corrective Action Request we will determine the Root Cause of the problem and take the necessary actions to eliminate it. You will be contacted by one of our employees who will review the problem with you and update you, with the second part of the same form, on our actions.

Your business is very important to us. Please, take the time and let us know how we can improve.

Sincerely,

Sergio PIRAS

Vice President and General Manager
VARIAN Vacuum Technologies

Note: Fax or mail the Customer Request for Action (see backside page) to VARIAN Vacuum Technologies (Torino) - Quality Assurance or to your nearest VARIAN representative for onward transmission to the same address.

CUSTOMER REQUEST FOR CORRECTIVE / PREVENTIVE / IMPROVEMENT ACTION

TO: VARIAN VACUUM TECHNOLOGIES TORINO – QUALITY ASSURANCE

FAX N°: XXXX - 011 - 9979350

ADDRESS: VARIAN S.p.A. - Via F.lli Varian, 54 - 10040 Leiní (Torino) - Italy

E-MAIL: marco.marzio@varianinc.com

NAME:	COMPANY:	FUNCTION:

ADDRESS:

TEL. N°: _____ FAX N°: _____

E-MAIL: _____

PROBLEM / SUGGESTION:

REFERENCE INFORMATION (model n°, serial n°, ordering information, time to failure after installation, etc.):

DATE _____

CORRECTIVE ACTION PLAN /ACTUATION (by VARIAN VTT) LOG N° _____

XXXX – Code for dialing Italy from your country (es. 01139 from USA; 00139 from Japan, etc.)

VARIAN

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INFORMAZIONI GENERALI

Questa apparecchiatura è destinata ad uso professionale. L'utilizzatore deve leggere attentamente il presente manuale di istruzioni ed ogni altra informazione addizionale fornita dalla Varian prima dell'utilizzo dell'apparecchiatura. La Varian si ritiene sollevata da eventuali responsabilità dovute all'inosservanza totale o parziale delle istruzioni, ad uso improprio da parte di personale non addestrato, ad interventi non autorizzati o ad uso contrario alle normative nazionali specifiche.

Nei paragrafi seguenti sono riportate tutte le informazioni necessarie a garantire la sicurezza dell'operatore durante l'utilizzo dell'apparecchiatura. Informazioni dettagliate sono fornite nella sezione "Technical Information".

Questo manuale utilizza le seguenti convenzioni:

PERICOLO!

I messaggi di pericolo attirano l'attenzione dell'operatore su una procedura o una pratica specifica che, se non eseguita in modo corretto, potrebbe provocare gravi lesioni personali.

ATTENZIONE!

I messaggi di attenzione sono visualizzati prima di procedure che, se non osservate, potrebbero causare danni all'apparecchiatura.

NOTA

Le note contengono informazioni importanti estrapolate dal testo.

IMMAGAZZINAMENTO

Durante il trasporto e l'immagazzinamento dei MiniLink devono essere soddisfatte le seguenti condizioni ambientali:

- temperatura: da -20 °C a +70 °C
- umidità relativa: 0 - 95% (non condensante)

PREPARAZIONE PER L'INSTALLAZIONE

Il controller viene fornito in un imballo protettivo speciale; se si presentano segni di danni, che potrebbero essersi verificati durante il trasporto, contattare l'ufficio vendite locale.
Durante l'operazione di disimballo, prestare particolare attenzione a non lasciar cadere il modulo e a non sottoporlo ad urti.
Non disperdere l'imballo nell'ambiente. Il materiale è completamente riciclabile e risponde alla direttiva CEE 85/399 per la tutela dell'ambiente.

Ogni controller giunge dalla Varian predisposto per una certa tensione di alimentazione:

- il modello 929-0300 (120 Vac, 50/60 Hz)
- il modello 929-0301 (220 Vac, 50/60 Hz)

INSTALLAZIONE

PERICOLO!

Il controller è fornito di un cavo di alimentazione a tre fili con una spina di tipo approvato a livello internazionale. Utilizzare sempre questo cavo di alimentazione ed inserire la spina in una presa con un adeguato collegamento di massa onde evitare scariche elettriche. Prima di eseguire qualsiasi operazione di installazione o manutenzione del controller scollegarlo dalla presa di alimentazione.

NOTA

Il controller deve essere installato all'interno di un apposito rack. In ogni caso occorre che l'aria di raffreddamento possa circolare liberamente intorno all'apparato. Non installare e/o utilizzare il controller in ambienti esposti ad agenti atmosferici (pioggia, gelo, neve), polveri, gas aggressivi, in ambienti esplosivi o con elevato rischio di incendio.

Durante il funzionamento è necessario che siano rispettate le seguenti condizioni ambientali:

- temperatura: da 0 °C a +45 °C
- umidità relativa: 0 - 95% (non condensante).

USO

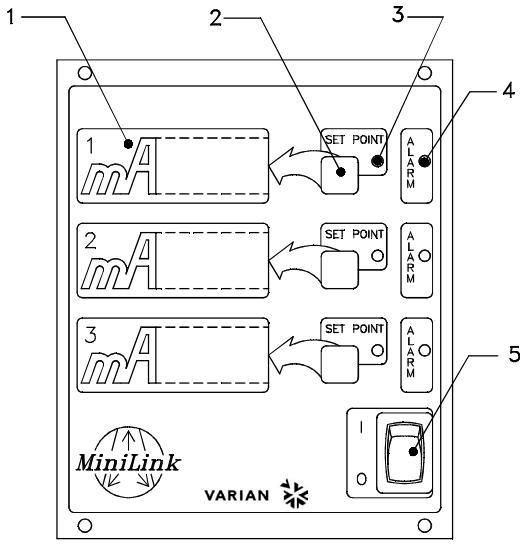
In questo paragrafo sono riportate le principali procedure operative. Per ulteriori dettagli e per procedure che coinvolgono collegamenti o particolari opzionali, fare riferimento al paragrafo "Use" della sezione "Technical Information".

Comandi, Indicatori e Connettori del Controller

Di seguito sono illustrati sia il pannello frontale che quello posteriore con le interconnessioni.

Per maggiori dettagli fare riferimento alla sezione "Technical Information".

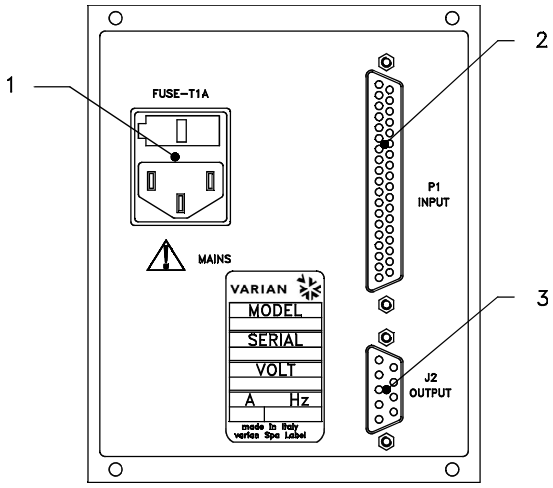
Nella figura che segue sono illustrati i comandi presenti sul pannello frontale dei MiniLink.



1. Display digitale da 3 1/2 digit.
2. Interruttore di visualizzazione del valore del set point: se premuto, sul display viene visualizzato il reale valore del set point.
3. Trimmer per la selezione del set point: trimmer da 10 giri per selezionare il valore del set point.
4. LED condizione di allarme. Si accende quando l'alta tensione del MiniVac corrispondente è disattivata, o quando la corrente della pompa è maggiore rispetto al valore del set point.
5. Interruttore ON/OFF principale.

Comandi pannello frontale dei MiniLink

Nella figura che segue sono illustrati i comandi presenti sul pannello posteriore dei MiniLink.



1. Modulo di ingresso dell'alimentazione per il MiniLink. Comprende i fusibili di rete, il cambia-tensione, la presa di rete.
2. Connettore di ingresso per collegare il cavo proveniente dal MiniVac 3.
3. Connettore di uscita: su questo connettore sono disponibili i contatti dei 3 relé alarm.

Comandi pannello posteriore dei MiniLink

PROCEDURE DI USO

Accensione del Controller

Per accendere il controller portare l'interruttore principale in posizione ON dopo aver inserito il cavo di alimentazione nella presa di rete.

MANUTENZIONE

I controller della serie MiniLink non richiedono alcuna manutenzione. Qualsiasi intervento deve essere eseguito da personale autorizzato.
In caso di guasto è possibile usufruire del servizio di riparazione Varian o del "Varian advance exchange service", che permette di ottenere un controller rigenerato in sostituzione di quello guasto.

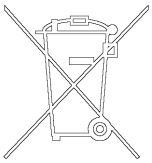
PERICOLO!

Prima di effettuare qualsiasi intervento sul controller scollegare il cavo di alimentazione.

Qualora un controller dovesse essere rottamato, procedere alla sua eliminazione nel rispetto delle normative nazionali specifiche.

SMALTIMENTO

Significato del logo "WEEE" presente sulle etichette.
Il simbolo qui sotto riportato è applicato in ottemperanza alla direttiva CE denominata "WEEE". Questo simbolo **(valido solo per i paesi della Comunità Europea)** indica che il prodotto sul quale è applicato, NON deve essere smaltito insieme ai comuni rifiuti domestici o industriali, ma deve essere avviato ad un sistema di raccolta differenziata. Si invita pertanto l'utente finale a contattare il fornitore del dispositivo, sia esso la casa madre o un rivenditore, per avviare il processo di raccolta e smaltimento, dopo opportuna verifica dei termini e condizioni contrattuali di vendita.



ALLGEMEINES

Dieser Apparat ist für Fachbetriebe bestimmt. Vor Gebrauch sollte der Benutzer dieses Handbuch sowie alle weiteren mitgelieferten Zusatzdokumentationen genau lesen. Bei - auch nur teilweiser - Nichtbeachtung der enthaltenen Hinweise, unsachgemäßem Gebrauch durch ungeschultes Personal, nicht autorisierten Eingriffen und Mißachtung der einheimischen, hier zur Geltung kommenden Bestimmungen übernimmt die Firma Varian keinerlei Haftung.

In den folgenden Abschnitten sind alle erforderlichen Informationen für die Sicherheit des Bedieners bei der Anwendung des Geräts aufgeführt. Detaillierte technische Informationen sind im Anhang "Technical Information" enthalten.

In dieser Gebrauchsanleitung werden Sicherheitshinweise folgendermaßen hervorgehoben:

GEFAHR!

Die Gefahrenhinweise lenken die Aufmerksamkeit des Bedieners auf eine bestimmte Prozedur oder Praktik, die bei unkorrekter Ausführung schwere Verletzungen hervorrufen können.

ACHTUNG!

Die Warnhinweise vor bestimmten Prozeduren machen den Bediener darauf aufmerksam, daß bei Nichteinhaltung Schäden an der Anlage entstehen können.

ANMERKUNG

Die Anmerkungen enthalten wichtige Informationen, die aus dem Text hervorgehoben werden.

LAGERUNG

Beim Transport und bei der Lagerung der Controller müssen folgende klimatische Verhältnisse eingehalten werden:

- Temperatur: von -20 °C bis +70 °C
- Relative Luftfeuchtigkeit: 0-95 %
  (nicht kondensierend)

VOR DER INSTALLATION

Der Controller wird mit einer speziellen Schutzverpackung geliefert.
Eventuelle Transportschäden müssen der zuständigen örtlichen Verkaufsstelle gemeldet werden.
Beim Auspacken vorsichtig vorgehen, damit der Controller nicht fällt oder Stößen ausgesetzt wird.
Das Verpackungsmaterial muß korrekt entsorgt werden. Es ist vollständig recyclebar und entspricht der EG-Richtlinie 85/399 für Umweltschutz.

Alle Varian-Controller sind für eine bestimmte Anschlußspannung ausgelegt:

- das Modell 929-0300 (120 V~, 50/60 Hz)
- das Modell 929-0301 (220 V~, 50/60 Hz).

INSTALLATION

GEFAHR!

Der Controller wird mit einem 3-adrigen Netzkabel geliefert, das mit einem den internationalen Normen entsprechenden Stecker ausgerüstet ist.

Es sollte immer dieses Netzkabel benutzt werden, das an eine korrekt geerdete Steckdose anzuschließen ist, um Stromentladungen zu vermeiden.
Vor jedem Montage- bzw. Wartungseingriff muß deshalb der Netzstecker gezogen werden.

ANMERKUNG

Der Controller kann auf einen Tisch oder ein Gestell montiert werden. In beiden Fällen muß auf die ungehinderte Zirkulation der Kühlluft im Bereich des Geräts geachtet werden.
Der Controller darf nicht in Umgebungen installiert u/o benutzt werden, die Witterungseinflüssen (Regen, Frost, Schnee), Staub und aggressiven Gasen ausgesetzt sind und in denen Explosions- und erhöhte Brandgefahr besteht.

Beim Betrieb müssen folgende Umgebungsbedingungen eingehalten werden:

- Temperatur: von +0 °C bis +45 °C
- Relative Luftfeuchtigkeit: 0 - 95 %
  (nicht kondensierend).

GEBRAUCH

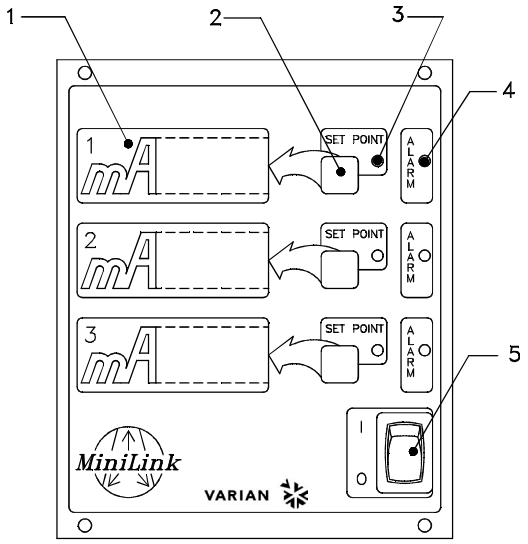
In diesem Kapitel sind die wichtigsten Betriebsvorgänge aufgeführt. Für weitere Hinweise bezüglich Anschlüsse und Montage des bestellbaren Zubehörs siehe Kapitel "Use" im Anhang zu "Technical Information".

Steuerungen, Anzeigen und Anschlüsse des Controllers

Nachstehend werden das Bedienfeld des Controllers sowie die Anschlußfelder beschrieben.

Für weitere Einzelheiten siehe "Technical Information".

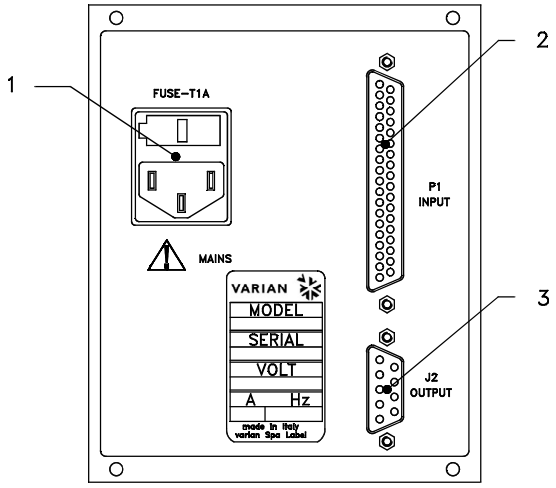
Die Regler der vorderen Schaltfläche des MiniLink sind in der folgenden Abbildung dargestellt.



1. Digitales Display mit 3 1/2 Ziffern
2. Den Einstellpunktdisplay-Werteschalter einstellen: bei Drücken erscheint der aktuelle Einstellpunkt auf dem Display.
3. Trimmer für Einstellpunkt: 10 dreht den Trimmer zur Wahl des Einstellpunkts.
4. LED für die Alarmbedingung. Sie geht an, wenn die HV des entsprechenden MiniVac aus ist oder der Pumpstrom größer ist als der Wert des Einstellpunkts.
5. Hauptschalter für AN/AUS.

Regler der vorderen Schaltfläche des MiniLink

Die Regler der hinteren Schaltfläche des MiniLink sind in der folgenden Abbildung dargestellt.



1. MiniLink Stomeingangsmodul bestehend aus Hauptsicherungen, Spannungswandler, Hauptsteckdose.
2. Eingangsstecker zum Anschluss des Flachkabels vom 3 MiniVac.
3. Ausgangsstecker: die Kontakte der 3 Alarmrelais stehen an diesem Stecker zur Verfügung

Regler der hinteren Schaltfläche des MiniLink

BEDIENUNG

Einschalten des Controllers

Zum Einschalten des Controllers genügt es, das Netzkabel an die Steckdose anzuschließen.

WARTUNG

Die Controller der MiniVac Serie brauchen keinerlei Wartung. Alle Eingriffe dürfen nur von autorisiertem Personal vorgenommen werden.
Bei Defekten kann der Reparatur Service von Varian oder der "Varian Advance Exchange Service" in Anspruch genommen werden, der den defekten Controller durch ein Austauschgerät ersetzt.

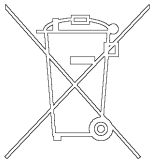
GEFAHR!

Vor jedem Eingriff am Controller muß der Netzstecker gezogen werden.

Eine eventuelle Verschrottung muß unter Einhaltung der einschlägigen landesüblichen Vorschriften erfolgen.

ENTSORGUNG

Bedeutung des "WEEE" Logos auf den Etiketten.
Das folgende Symbol ist in Übereinstimmung mit der EU-Richtlinie WEEE (Waste Electrical and Electronic Equipment) angebracht.
Dieses Symbol (**nur in den EU-Ländern gültig**) zeigt an, dass das betreffende Produkt nicht zusammen mit Haushaltsmüll entsorgt werden darf sondern einem speziellen Sammelsystem zugeführt werden muss.
Der Endabnehmer sollte daher den Lieferanten des Geräts - d.h. die Muttergesellschaft oder den Wiederverkäufer - kontaktieren, um den Entsorgungsprozess zu starten, nachdem er die Verkaufsbedingungen geprüft hat.



INDICATIONS GENERALES

Cet appareillage a été conçu en vue d'une utilisation professionnelle. L'utilisateur doit lire attentivement cette notice d'instructions ainsi que toute autre indication supplémentaire fournie par Varian, avant l'utilisation de l'appareil. Varian décline toute responsabilité quant à: non-respect total ou partiel des instructions pour l'utilisation, mauvais usage par du personnel non formé, opérations non autorisées usage contraire aux réglementations nationales spécifiques.

Les paragraphes suivants donnent toutes les indications nécessaires pour garantir la sécurité de l'opérateur pendant l'utilisation de l'appareillage. Des renseignements plus détaillés se trouvent dans la section "Technical Information".

Cette notice utilise les signes conventionnels suivants:

DANGER!

Les messages de danger attirent l'attention de l'opérateur sur une procédure ou une manoeuvre spéciale qui, si elle n'est pas effectuée correctement, risque de provoquer de graves lésions.

ATTENTION!

Les messages d'attention apparaissent avant certaines procédures qui, si elles ne sont pas observées, pourraient endommager sérieusement l'appareillage.

NOTE

Les notes contiennent des renseignements importants, isolés du texte.

EMMAGASINAGE

Pendant le transport et l'emmagasinage des Mini Vac contrôleurs, il faudra veiller à respecter les conditions environnementales suivantes:

- Température: de - 20 °C à + 70 °C
- Humidité relative: 0 - 95% (non condensante).

PREPARATION POUR L'INSTALLATION

Le contrôleur est fourni dans un emballage de protection spécial; si vous constatez des marques de dommages pouvant s'être produits pendant le transport, adressez-vous aussitôt au bureau de vente local. Pendant l'opération d'ouverture de l'emballage, veiller tout particulièrement à ne pas laisser tomber le contrôleur et à ne lui faire subir aucun choc. Ne pas jeter l'emballage dans la nature. Le matériel est entièrement recyclable et il est conforme à la directive CEE 83/399 en matière de protection de l'environnement.

Chaque contrôleur est fourni par Varian prééquipé pour une certaine tension d'alimentation:

- modèle 929-0300 (120 Vac, 50/60 Hz)
- modèle 929-0301 (220 Vac, 50/60 Hz)

INSTALLATION

DANGER!

Le contrôleur est doté d'un câble d'alimentation à trois fils avec une fiche du type approuvé au niveau international. Utiliser toujours ce câble d'alimentation et introduire la fiche dans une prise pourvue d'un branchement approprié à la masse, afin d'éviter toute décharge électrique. Avant d'effectuer toute opération d'installation ou d'entretien du contrôleur, le débrancher de la prise d'alimentation.

NOTE

Le contrôleur doit être installé dans une baie prévue à cet effet. Il est en tout cas nécessaire que l'air de refroidissement puisse circuler librement à l'intérieur de l'appareil. Ne pas installer et/ou utiliser le contrôleur dans des milieux exposés aux agents atmosphériques (pluie, gel, neige), aux poussières, aux gaz de combat ni dans des milieux explosifs ou à risque élevé d'incendie.

Pendant le fonctionnement, il est nécessaire de respecter les conditions environnementales suivantes:

- Température: 0 °C à + 45 °C
- Humidité relative: 0 - 95% (non condensante).

UTILISATION

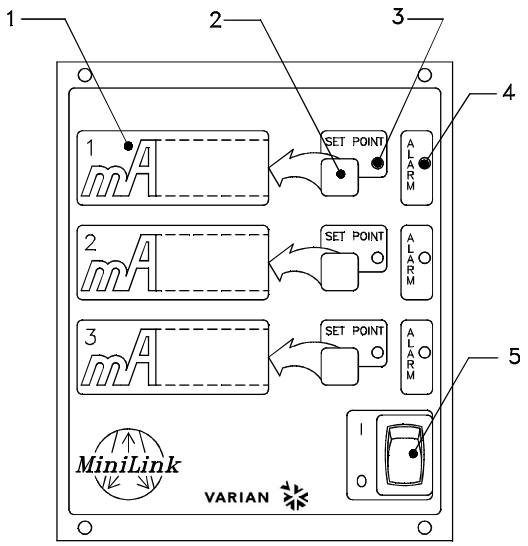
Ce paragraphe décrit les principales procédures de fonctionnement. Pour tout autre complément d'information et pour les procédures concernant des connexions ou des éléments en option, se reporter au paragraphe "Use" de la section "Technical Information".

Commandes, Indicateurs et Connecteurs du Contrôleur

La figure ci-après représente le tableau de commande du Contrôleur et les tableaux d'interconnexion.

Pour de plus amples détails, se reporter à la section "Technical Information".

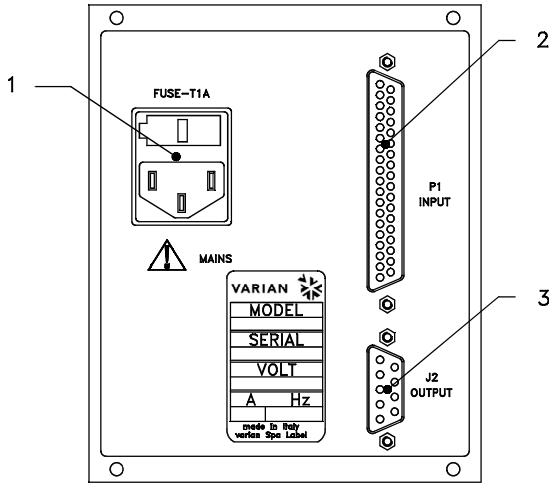
La figure ci-après représente les commandes du tableau avant du MiniLink.



1. Ecran “digital” 3 1/2 caractère.
2. Interrupteur d’affichage de la valeur du set point (point de réglage): il permet d’afficher sur l’écran la valeur réelle du set point.
3. Compensateur pour la sélection du set point: compensateur à 10 tours pour sélectionner la valeur du set point.
4. LED condition d’alarme. Il clignote quand la haute tension du MiniVac correspondant est désactivée ou quand le courant de la pompe est plus élevé que la valeur du set point.
5. Interrupteur ON/OFF principal.

Tableau avant du MiniLink

La figure ci-après représente les commandes du tableau arrière du MiniLink.



1. Module d’entrée de l’alimentation du MiniLink. Il est doté de fusibles du réseau, du dispositif de changement de tension, de la prise du réseau.
2. Connecteur d’entrée pour connecter le câble provenant du MiniVac 3.
3. Connecteur de sortie: sur ce connecteur il y a les contacts des 3 relais alarm (d’alarme).

Tableau arrière du MiniLink

PROCEDURES D'UTILISATION

Mise sous tension du Contrôleur

Pour mettre le contrôleur sous tension, il suffit de mettre l'interrupteur principal sur ON après avoir branché le câble d'alimentation sur la prise du réseau.

ENTRETIEN

Les contrôleurs de la série MiniVac ne requièrent aucun entretien. Toute intervention doit être effectuée par du personnel autorisé. En cas de panne, il est possible de faire appel au service de réparation Varian ou au "Varian advance exchange service", qui permet d'obtenir un contrôler régénéré à la place de celui en panne.

DANGER!

Avant d'effectuer toute intervention sur le contrôleur, débrancher le câble d'alimentation.

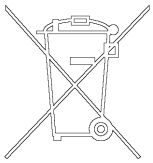
Si un contrôleur doit être mis au rebut l'éliminer conformément aux réglementations nationales en la matière.

MISE AU REBUT

Signification du logo "WEEE" figurant sur les étiquettes.

Le symbole ci-dessous est appliqué conformément à la directive CE nommée "WEEE".

Ce symbole **(uniquement valide pour les pays de la Communauté européenne)** indique que le produit sur lequel il est appliqué NE doit PAS être mis au rebut avec les ordures ménagères ou les déchets industriels ordinaires, mais passer par un système de collecte sélective. Après avoir vérifié les termes et conditions du contrat de vente, l'utilisateur final est donc prié de contacter le fournisseur du dispositif, maison mère ou revendeur, pour mettre en œuvre le processus de collecte et mise au rebut.



GENERAL INFORMATION

This equipment is destined for use by professionals. The user should read this instruction manual and any other additional information supplied by Varian before operating the equipment. Varian will not be held responsible for any events occurring due to non-compliance, even partial, with these instructions, improper use by untrained persons, non-authorised interference with the equipment or any action contrary to that provided for by specific national standards.

The following paragraphs contain all the information necessary to guarantee the safety of the operator when using the equipment. Detailed information is supplied in the section "Technical Information".

This manual uses the following standard protocol:

WARNING!

The warning messages are for attracting the attention of the operator to a particular procedure or practice which, if not followed correctly, could lead to serious injury.

CAUTION!

The caution messages are displayed before procedures which, if not followed, could cause damage to the equipment.

NOTE

The notes contain important information taken from the text.

STORAGE

When transporting and storing the MiniLink, the following environmental requirements should be satisfied:

- temperature: from -20 °C to + 70 °C
- relative humidity: 0 - 95% (without condensation)

PREPARATION FOR INSTALLATION

The controller is supplied in a special protective packing. If this shows signs of damage which may have occurred during transport, contact your local sales office. When unpacking, ensure that the module is not dropped or subjected to any form of impact. Do not dispose of the packing materials in an unauthorised manner. The material is 100% recyclable and complies with EEC Directive 85/399.

Each controller is factory set for a specific power supply:

- Model 929-0300 (120 Vac, 50/60 Hz)
- Model 929-0301 (220 Vac, 50/60 Hz)

INSTALLATION

WARNING!

The controller is equipped with a 3-wire power cord and plug (internationally approved) for user's safety. Use this power cord and plug in conjunction with a properly grounded power socket to avoid electrical shock. Before servicing the unit, disconnect the input power cable.

NOTE

The controller must be installed inside a rack module, but it must be positioned so that free air can flow through the holes. Do not install or use the controller in an environment exposed to atmospheric agents (rain, snow, ice), dust, aggressive gases, or in explosive environments or those with a high fire risk.

During operation, the following environmental conditions must be respected:

- temperature: from 0 °C to +45 °C
- relative humidity: 0 - 95% (without condensation)

USE

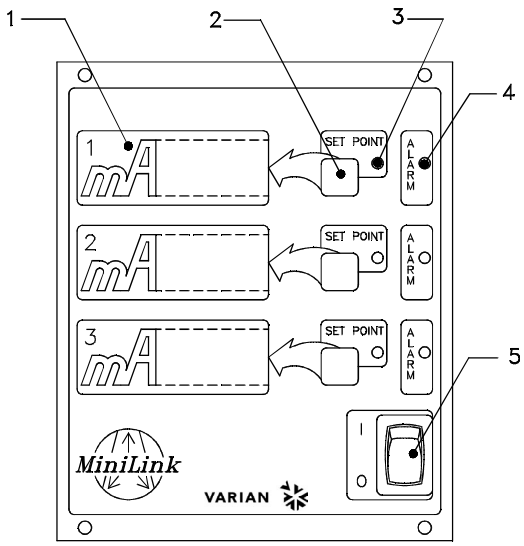
This paragraph describes the fundamental operating procedures. Detailed information and operating procedures that involve optional connections or options are supplied in the paragraph "USE" of the section "Technical Information".

Controller Controls, Indicators and Connectors

The following paragraph illustrates either the front and rear panel with its interconnections.

More details are contained in the appendix "Technical Information".

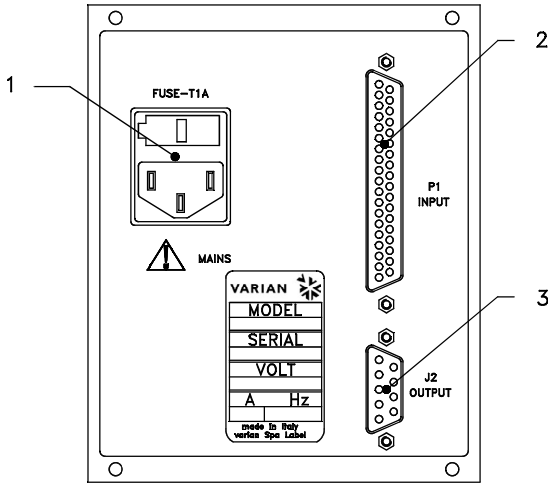
The MiniLink front panel controls are shown in the following figure.



1. Digital display 3 1/2 digit.
2. Set point display value switch: when pressed, the actual set point value is shown on the display.
3. Set point selection trimmer: 10 turns trimmer to select the set point value.
4. LED indicating the alarm condition. It lights when the High Voltage of the corresponding MiniVac is off, or the pump current is higher than the set point value.
5. Mains ON/OFF switch.

MiniLink Front Panel Controls

The MiniLink rear panel controls are shown in the following figure.



1. MiniLink power entry module consisting of mains fuses, voltage change over, mains socket.
2. Input connector to connect the ribbon cable coming from the 3 MiniVac.
3. Output connector: the contacts of the 3 alarm relays are available at this connector

MiniLink Rear Panel Controls

USE PROCEDURE

Controller Start-up

To start-up the controller, turn the main switch to ON, after plugging the power cable into a suitable power source.

MAINTENANCE

The MiniLink series controllers do not require any maintenance interventions. Any intervention must be performed by authorised personnel only.
When a fault has occurred it is possible to use the Varian repair service or the “Varian advance exchange service”, that allows to obtain a regenerated controller replacing the faulty one.

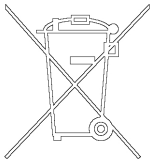
WARNING!

Before carrying out any work on the controller, disconnect it from the supply.

If a controller is to be scrapped, it must be disposed of in accordance with the specific national standards.

DISPOSAL

Meaning of the "WEEE" logo found in labels
The following symbol is applied in accordance with the EC WEEE (Waste Electrical and Electronic Equipment) Directive.
This symbol (**valid only in countries of the European Community**) indicates that the product it applies to must NOT be disposed of together with ordinary domestic or industrial waste but must be sent to a differentiated waste collection system.
The end user is therefore invited to contact the supplier of the device, whether the Parent Company or a retailer, to initiate the collection and disposal process after checking the contractual terms and conditions of sale.



MINILINK CONTROLLER DESCRIPTION

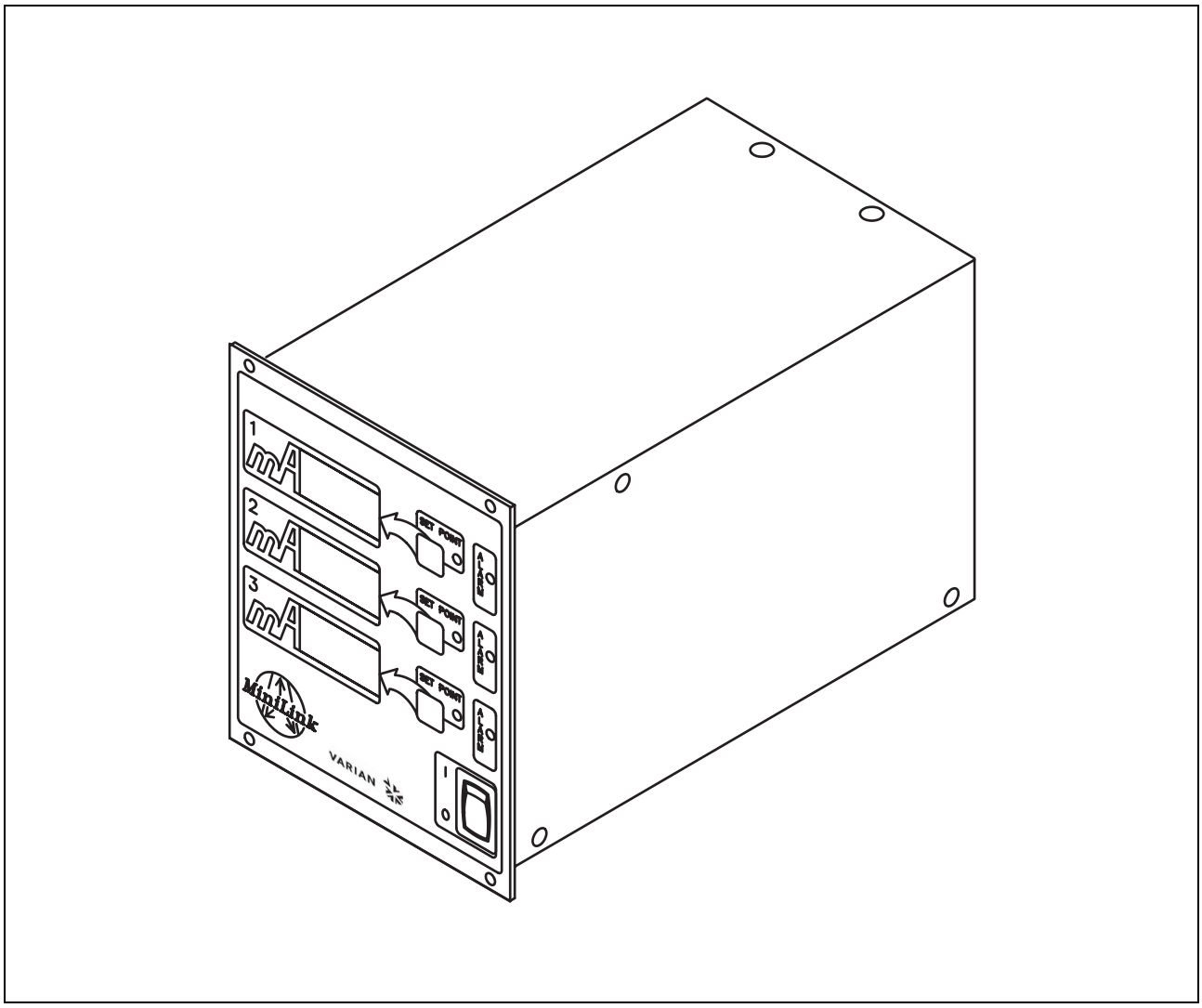
The MiniLink is a display and set point unit designed to be interfaced with any version of MiniVac.

It is a quarter rack unit with the same dimensions as MiniVac that can be connected to a maximum of three MiniVac units to control the pump current.

The current values are displayed on three digital display on the MiniLink front panel.

For each current an alarm threshold can be set. When the current value exceeds the threshold, a relay contact is switched.

A front panel LED lights when an alarm condition is detected.



MiniLink Unit

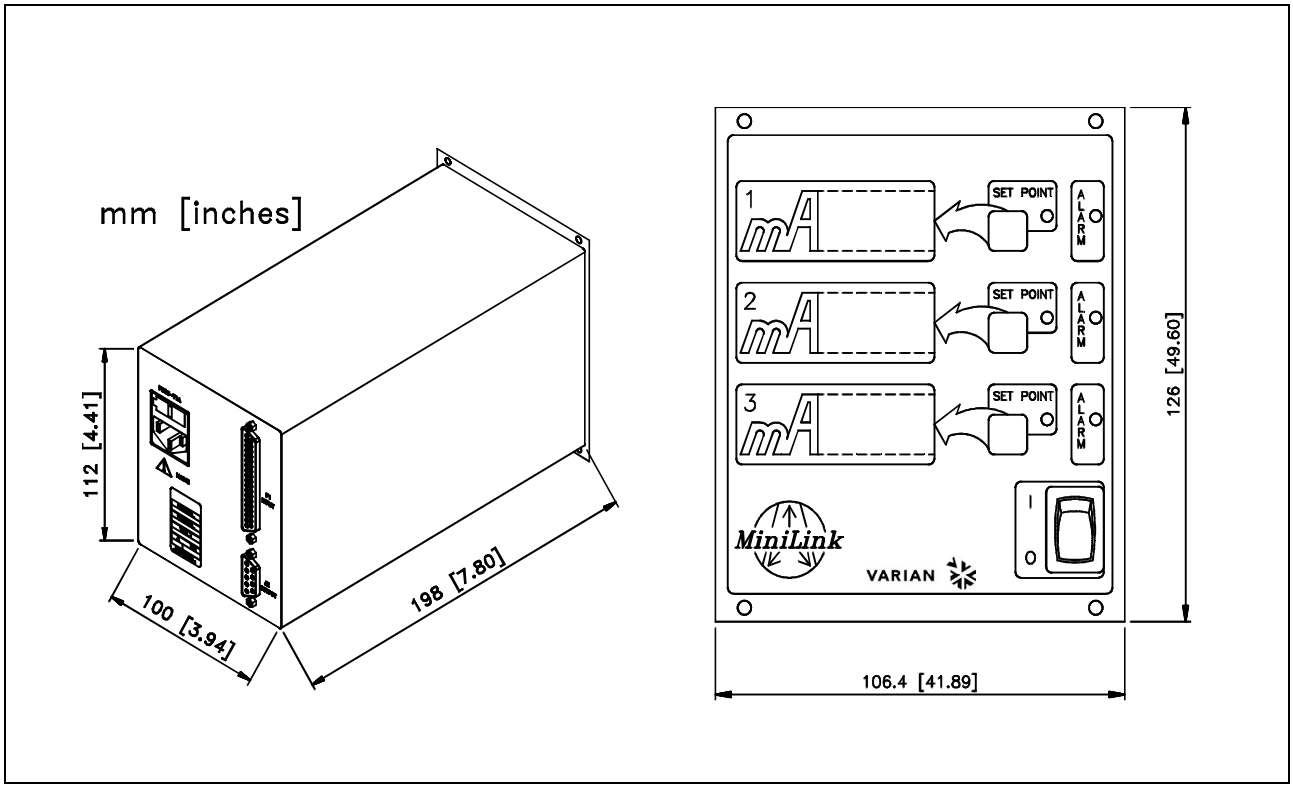
CONTROLLER SPECIFICATIONS

Operation	All type of MIniVac
Input: - Voltage - Frequency - Power - Fuse	100 Vac 120 Vac 220 Vac 240 Vac 47 to 63 Hz 18 VA 2 x T 1A (disregarding the mains)
Operating temperature	0°C to 45°C
Storage temperature	20°C to + 70°C

Radio interference suppression	Conforms to: EN55011 Class A Gr.1 EN61000-4-2 (ESD) EN61000-4-3 (Rad. RF Imm.) EN61000-4-4 (Burst)
Safety	Conforms to EN61010-1
Input connector (P1)	37-pin “D”type male
Output connector (J2)	9-pin “D” type male
Cable	Mains, 3 meters long
Weight	2.1 Kg 4.62 lbs

CONTROLLER OUTLINE

The outline dimensions of the MiniLink are shown in the following figure.



MiniLink Outline Dimensions

INSTALLATION

Inspect the MiniLink for any shipping damage.

Model 929-0300 is factory set for 120 Vac operation.

Model 929-0301 is factory set for 220 Vac operation

WARNING!

The MiniLink is equipped with a 3-wire power cord and plug (internationally approved) for user's safety. Use this power cord and plug in conjunction with a properly grounded power socket to avoid electrial shock.

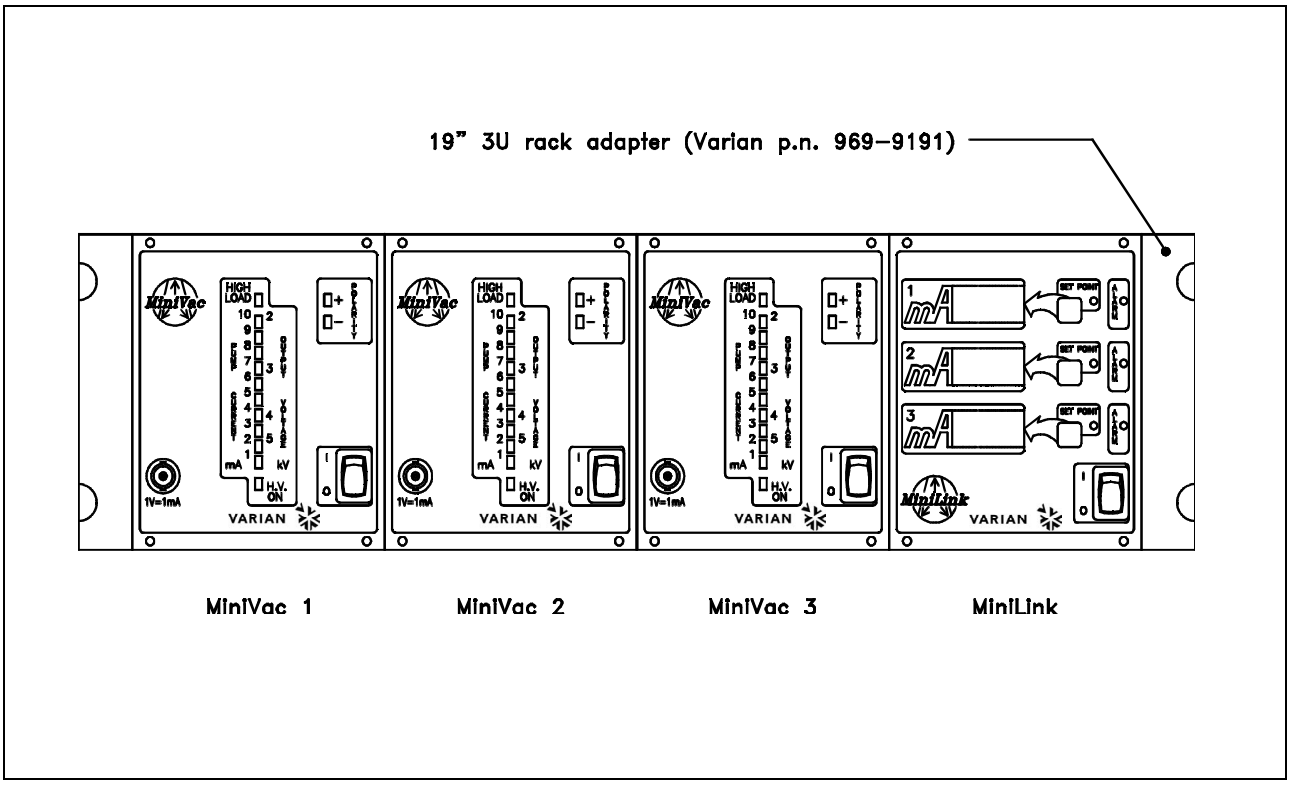
Line Voltage Change Over

If a change in line voltage operation is desired, proceed as follows:

- Unplug the power cord from the controller rear panel socket.
- On the power entry module (rear panel), check back door for voltage selector set.
- Using a small screwdriver, pull out the voltage selector and fuses.
- Select the operating voltage, then firmly insert the voltage selector and fuses in place.
- Check voltage selector window for correct set and connect the power cord.

MiniLink Installation

The MiniLink is designed to be installed, together with the three controlled MiniVac, in a 19" rack by means of the specific rack adapter as illustrated in the following figure.



MiniLink Installation

Input/Output Interconnections

The MiniLink is provided with two connector that holds all input and output signal. All input signal coming from the controlled MiniVac are available at connector P1, the output signal are available at connector J2.

The interconnection with MiniVac is obtained by means of a supplied ribbon cable.

One side of this cable is provided with two connectors to match P1 and J2 connectors of MiniLink. The cables from P1 and J2 are connected to a 37-pin connector (connector D) that replicates the signals from J2 and from the three MiniVac recorder connectors. The flat cable from connector D is subdivided in three parts with three connectors (A, B and C) that match the corresponding recorder output connectors of the three MiniVacs.

The figure "MiniLink Interconnections" illustrates the connections of MiniLink with MiniVacs.

Input Signals

The following table summarizes the signal available on P1 connector.

Pin	Signal
1	MiniVac 1 - 1 V corresponds to 1 mA
2	MiniVac 1 - 10 V corresp. to 1 mA
3	MiniVac 1 - Remote ON/OFF
4	MiniVac 1 - 1 V = 1 kV AN. OUT
5	MiniVac 1 - H. V. ON
6	MiniVac 2 - Ground
7	MiniVac 2 - Remote ON/OFF
8	MiniVac 2 - Ground
9	MiniVac 2 - H. V. ON
10	MiniVac 3 - 1 V corresponds to 1 mA
11	MiniVac 3 - 10 V corresp. to 1 mA
12	MiniVac 3 - Remote ON/OFF
13	MiniVac 3 - 1 V = 1 kV AN. OUT
14	MiniVac 3 - H. V. ON
15 to 19	Not connected
20	MiniVac 1 - Ground
21	MiniVac 1 - Remote ON/OFF
22	MiniVac 1 - Ground
23	MiniVac 1 - H. V. ON
24	MiniVac 2 - 1 V corresponds to 1 mA
25	MiniVac 2 - 10 V corresp. to 1 mA
26	MiniVac 2 - Remote ON/OFF
27	MiniVac 2 - 1 V = 1 kV AN. OUT
28	MiniVac 2 - H. V. ON
29	MiniVac 3 - Ground
30	MiniVac 3 - Remote ON/OFF
31	MiniVac 3 - Ground
32	MiniVac 3 - H. V. ON
33 to 37	Not connected

Output Signals

The MiniLink output signals are available on J2 connector (connector H in the figure "MiniLink Interconnections").

These signals correspond to the signal from the alarm relays corresponding to each MiniVac.

The following table summarizes the connector signals where N. O. means “Normally Open” and N. C. “Normally Closed” with reference to the relay contact when it is not energized.

Pin	Signal	
1	N. O.	Alarm MiniVac 1
2	Common	
3	N. C.	
4	N. O.	Alarm MiniVac 2
5	Common	
6	N. C.	
7	N. O.	Alarm MiniVac 3
8	Common	
9	N. C.	

The output relays are not energized when the H. V. of the corresponding MiniVac is OFF, or when the current is higher than the set-point (alarm condition). In case of relays energized (H. V. ON or current lower than set-point), the N. O. becomes closed and the N. C. becomes open.

Control Connector

The control connector (D in the following figure) replicates the signals from P1 and J2.

The following table summarizes the connector signals.

Pin	Signal
1	MiniVac 1 - 1 V corresponds to 1 mA
2	MiniVac 1 - 10 V corresp. to 1 mA
3	MiniVac 1 - Remote ON/OFF
4	MiniVac 1 - 1 V = 1 kV AN. OUT
5	MiniVac 1 - H. V. ON
6	MiniVac 2 - Ground
7	MiniVac 2 - Remote ON/OFF
8	MiniVac 2 - Ground
9	MiniVac 2 - H. V. ON
10	MiniVac 3 - 1 V corresponds to 1 mA
11	MiniVac 3 - 10 V corresp. to 1 mA
12	MiniVac 3 - Remote ON/OFF
13	MiniVac 3 - 1 V = 1 kV AN. OUT
14	MiniVac 3 - H. V. ON
15	Alarm MiniVac 2 - N. C.
16	Alarm MiniVac 3 - N. O.
17	Alarm MiniVac 3 - Common
18	Alarm MiniVac 3 - N. C.
19	Not connected
20	MiniVac 1 - Ground
21	MiniVac 1 - Remote ON/OFF

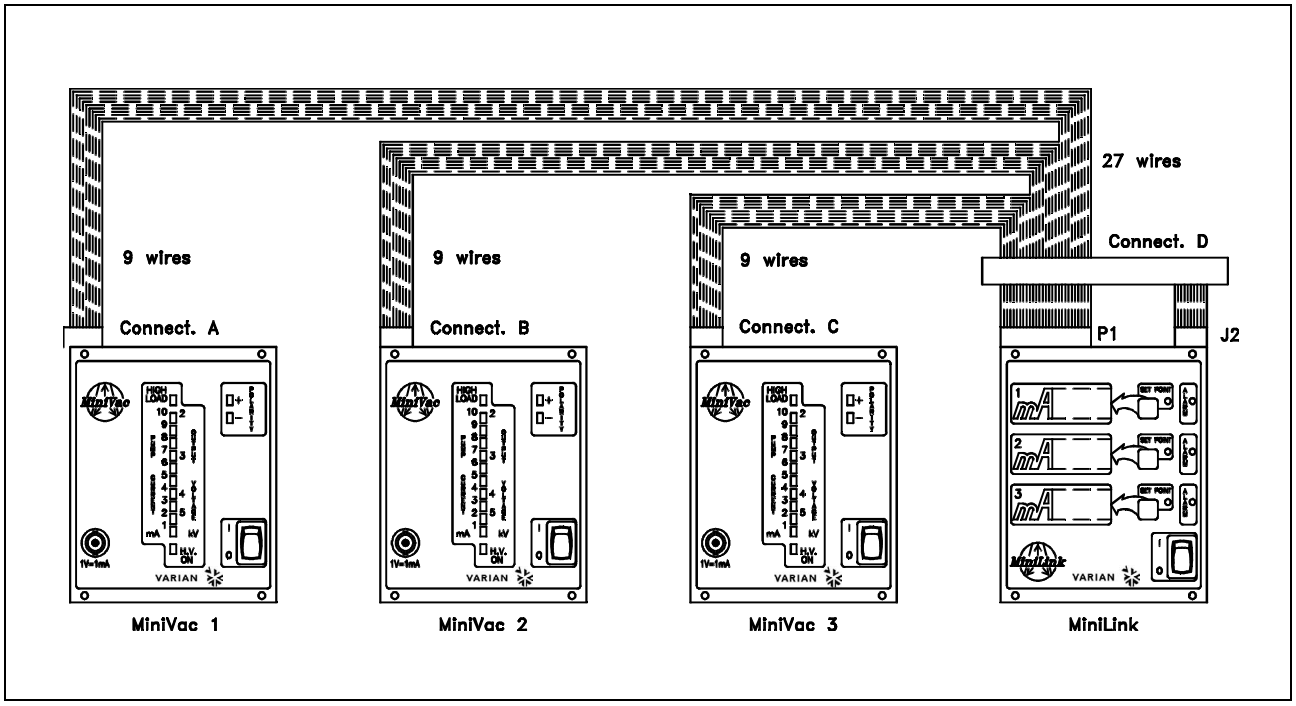
Pin	Signal
22	MiniVac 1 - Ground
23	MiniVac 1 - H. V. ON
24	MiniVac 2 - 1 V corresponds to 1 mA
25	MiniVac 2 - 10 V corresp. to 1 mA
26	MiniVac 2 - Remote ON/OFF
27	MiniVac 2 - 1 V = 1 kV AN. OUT
28	MiniVac 2 - H. V. ON
29	MiniVac 3 - Ground
30	MiniVac 3 - Remote ON/OFF
31	MiniVac 3 - Ground
32	MiniVac 3 - H. V. ON
33	Alarm MiniVac 1 - N. O.
34	Alarm MiniVac 1 - Common
35	Alarm MiniVac 1 - N. C.
36	Alarm MiniVac 2 - N. O.
37	Alarm MiniVac 2 - Common

MiniVac Connectors

The connection with MiniVac are performed by means of connectors A, B and C (see the following figure).

The following table summarizes the connector A, B and C signals.

Pin	Signal
1	1V = 1 mA REC. OUT
2	10V = 1 mA REC. OUT
3	REMOTE ON/OFF
4	1V = 1 kV AN. OUT
5	H. V. ON SIGNAL
6	GROUND
7	REMOTE ON/OFF
8	GROUND
9	H. V. ON SIGNAL



MiniLink Interconnection

OPERATION

The typical use of MiniLink is in conjunction with three MiniVac to control the relevant pump current.

After the installation and connection of MiniLink , it can be switched on to begin the operation.

Set-Point Setting

The three set-point levels are factory set to 1.00 mA.

To change one of the three set-point level operate according to the following procedure:

1. Press the corresponding set-point pushbutton so as to display the previous selection.
2. With a small screw driver, operate on the corresponding trimmer until the display will show the new desired set-point value.

MAINTENANCE

Replacement MiniLink are available on advance exchange basis through Varian service/sales organization.

MiniLink Spares and Accessories

Description	Part number
Ribbon cable	03.648488
Fuse T1A (5x20 mm)	67.150410-01
Rack adapter	969-9191
Mains cable 120 Vac USA plug	03-660441-02
Mains cable 220 Vac European plug	03-660441-01

Request for Return

1. A Return Authorization Number (RA#) **WILL NOT** be issued until this Request for Return is completely filled out, signed and returned to Varian Customer Service.
2. Return shipments shall be made in compliance with local and international **Shipping Regulations** (IATA, DOT, UN).
3. The customer is expected to take the following actions to ensure the **Safety** of workers at Varian: (a) Drain any oils or other liquids, (b) Purge or flush all gasses, (c) Wipe off any excess residues in or on the equipment, (d) Package the equipment to prevent shipping damage, (for Advance Exchanges please use packing material from replacement unit).
4. Make sure the shipping documents clearly show the RA# and then return the package to the Varian location nearest you.

North and South America	**Europe and Middle East**	**Asia and ROW**
Varian Vacuum Technologies	Varian SpA	Varian Vacuum Technologies
121 Hartwell Ave	Via Flli Varian 54	Local Office
Lexington, MA 02421	10040 Leini (TO) – ITALY	
Phone : +1 781 8617200	Phone: +39 011 9979111	
Fax: +1 781 8609252	Fax: +39 011 9979330	

CUSTOMER INFORMATION

Company name: ……

Contact person: Name: …… Tel: ……

Fax: …… E-Mail: ……

Ship Method: …… Shipping Collect #: …… P.O.#: ……

Europe only: VAT reg. Number: …… *USA only*: ☐ Taxable ☐ Non-taxable

Customer Ship To: …… Customer Bill To: ……

……

……

……

……

PRODUCT IDENTIFICATION

Product Description	Varian P/N	Varian S/N	Purchase Reference

TYPE OF RETURN *(check appropriate box)*

☐ Paid Exchange ☐ Paid Repair ☐ Warranty Exchange ☐ Warranty Repair ☐ Loaner Return
☐ Credit ☐ Shipping Error ☐ Evaluation Return ☐ Calibration ☐ Other …….

HEALTH and SAFETY CERTIFICATION

Varian Vacuum Technologies **CAN NOT ACCEPT** any equipment which contains **BIOLOGICAL HAZARDS** or **RADIOACTIVITY**. Call Varian Customer Service to discuss alternatives if this requirement presents a problem.

The equipment listed above (check one):

☐ **HAS NOT** been exposed to any toxic or hazardous materials

OR

☐ **HAS** been exposed to any toxic or hazardous materials. In case of this selection, check boxes for any materials that equipment was exposed to, check all categories that apply:

☐ Toxic ☐ Corrosive ☐ Reactive ☐ Flammable ☐ Explosive ☐ Biological ☐ Radioactive

List all toxic or hazardous materials. Include product name, chemical name and chemical symbol or formula.

……

Print Name: …… Customer Authorized Signature: ……

Print Title: …… Date: ……/……/……

NOTE: If a product is received at Varian which is contaminated with a toxic or hazardous material that was not disclosed, **the customer will be held responsible** for all costs incurred to ensure the safe handling of the product, and **is liable** for any harm or injury to Varian employees as well as to any third party occurring as a result of exposure to toxic or hazardous materials present in the product.

Do not write below this line

Notification (RA)#: …… Customer ID#: …… Equipment #: ……

VARIAN

Request for Return

ISO 9001 REGISTERED

FAILURE REPORT

TURBO PUMPS and TURBOCONTROLLERS

		POSITION	PARAMETERS	
☐ Does not start	☐ Noise	☐ Vertical	Power:	Rotational Speed:
☐ Does not spin freely	☐ Vibrations	☐ Horizontal	Current:	Inlet Pressure:
☐ Does not reach full speed	☐ Leak	☐ Upside-down	Temp 1:	Foreline Pressure:
☐ Mechanical Contact	☐ Overtemperature	☐ Other:	Temp 2:	Purge flow:
☐ Cooling defective		…….	OPERATION TIME:	

TURBOCONTROLLER ERROR MESSAGE:

ION PUMPS/CONTROLLERS

☐ Bad feedthrough	☐ Poor vacuum
☐ Vacuum leak	☐ High voltage problem
☐ Error code on display	☐ Other

Customer application:

VALVES/COMPONENTS

☐ Main seal leak	☐ Bellows leak
☐ Solenoid failure	☐ Damaged flange
☐ Damaged sealing area	☐ Other

Customer application:

LEAK DETECTORS

☐ Cannot calibrate	☐ No zero/high backround
☐ Vacuum system unstable	☐ Cannot reach test mode
☐ Failed to start	☐ Other

Customer application:

INSTRUMENTS

☐ Gauge tube not working	☐ Display problem
☐ Communication failure	☐ Degas not working
☐ Error code on display	☐ Other

Customer application:

PRIMARY PUMPS

☐ Pump doesn't start	☐ Noisy pump (describe)
☐ Doesn't reach vacuum	☐ Over temperature
☐ Pump seized	☐ Other

Customer application:

DIFFUSION PUMPS

☐ Heater failure	☐ Electrical problem
☐ Doesn't reach vacuum	☐ Cooling coil damage
☐ Vacuum leak	☐ Other

Customer application:

FAILURE DESCRIPTION

(Please describe in detail the nature of the malfunction to assist us in performing failure analysis):

NOTA: Su richiesta questo documento è disponibile anche in Tedesco, Italiano e Francese.
REMARQUE : Sur demande ce document est également disponible en allemand, italien et français.
HINWEIS: Auf Aufrage ist diese Unterlage auch auf Deutsch, Italienisch und Französisch erhältlich.

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