



Q MAT 03

Q MAT HP 1000

Condensate Drain



Installation and Operating Instructions (English)
Instrucciones de Montaje y de Uso (Español)
Instructions de Montage et de Service (Français)
Manual de Instalação e de Instruções (Português)

This manual contains important safety information and should be made available to all personnel who operate and/or maintain this product. Carefully read this manual before attempting to operate or perform maintenance on this equipment.

Manual No. 65102-3A

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Introduction

Thank you for purchasing the Q MAT condensate drain. Please read these instructions carefully before installing your Q MAT unit and putting it into service. Correct function of the Q MAT condensate drain - and thus reliable condensate discharge - can only be guaranteed if the recommendations and conditions stated here are adhered to.

Introducción

Les agradecemos que hayan decidido adquirir un Q MAT. Para garantizar un funcionamiento fiable, les rogamos que observen las indicaciones del manual del Q MAT. Siendo así, les podemos dar la garantía de un funcionamiento correcto del Q MAT y en consecuencia una evacuación fiable de los condensados.

Introduction

Vous venez d'acquérir un purgeur de condensât Q MAT et nous vous en félicitons. Nous vous recommandons de lire attentivement ces instructions avant le montage et la mise en service du Q MAT et de suivre nos conseils. Car, seul le respect scrupuleux des prescriptions et consignes données, peut garantir le parfait fonctionnement du Q MAT et une purge fiable du condensât.

Introduziste

Muito obrigado por se ter decidido pelo Q MAT. Leia, por favor, com atenção estas instruções de instalação e de serviço antes de montar e colocar em funcionamento o Q MAT e observe as nossas indicações. Só poderemos garantir um funcionamento correto e um escoamento seguro do condensado se as instruções e indicações forem rigorosamente respeitadas.

Safety Rules

1. Do not exceed maximum operating pressure (see type plate).

NOTE:

Maintenance work must only be carried out when the device is not under pressure.

2. Use only pressure-proof installation material. The feed line (1/2") must be firmly fixed. Discharge line: short pressure hose to pressure-proof pipe. Please ensure that condensate cannot squirt onto persons or objects.
3. Use only NPT fittings for the threaded connections.
4. For locking or holding in position during installation, use spanner area at inflow point. Spanner size 1.25".
5. The electrical installation must be carried out in compliance with the valid regulations.

NOTE:

Maintenance work is only allowed when the device is in a de-energized condition. Electrical work must always be performed by a qualified electrician.

6. In areas where there is danger of frost, the Q MAT device should be retrofitted with a thermostatically controlled heater (see accessories).
7. The Q MAT condensate drain will only function when voltage is being applied to the device.
8. Do not use the test button for continuous draining.
9. Do not use the Q MAT device in hazardous areas (with potentially explosive atmospheres).
10. Use only original spare parts, otherwise the guarantee will no longer be valid.

Indicaciones de Seguridad

1. No sobrepase la presión máxima. (ver etiqueta de identificación).

¡ATENCIÓN!

Realice los trabajos de mantenimiento solo si el aparato se encuentra sin presión.

2. Utilice solamente los accesorios y la tubería flexible autorizados para la presión conectada. La tubería de la entrada de los condensados (1/2") tiene que estar bien fijada. Salida de condensado: Un tubo flexible resistente a la presión unido a un tubo fijo resistente a la presión. Evite que personas o objetos pueden ser alcanzadas por el condensado.
3. Utilice solamente las guarniciones de NPT para las conexiones rascados.
4. Para el aguante o el giro durante la instalación utilice el área de la entrada de los condensados preparada para acoger una llave. SW No. 32.
5. Ejecute la instalación eléctrica según las normas vigentes.

¡ATENCIÓN!

Realice los trabajos de mantenimiento con el aparato desconectado. Los trabajos eléctricos sólo deben ser realizados por personal especializado.

6. En zonas con peligro de heladas monte la calefacción regulada por termostato.
7. El Q MAT sólo funciona si esta conectado a la corriente eléctrica.
8. No utilice el interruptor de "TEST" para la purga continua.
9. No utilice el Q MAT en áreas con peligro de explosiones.
10. Solamente utilice recambios originales. En caso contrario se cancela la garantía.

1. Ne pas dépasser la pression de service maximale (voir plaque signalétique).

ATTENTION!

Dépressuriser le purgeur avant toute intervention d'entretien.

2. N'utiliser que du matériel d'installation résistant à la pression. Conduite d'arrivée: toujours en tuyauterie rigide et fixe (1/2"). Conduite d'évacuation: flexible de faible longueur relié à un tube, tous deux résistant à la pression. Évitez que des personnes ou objets puissent être touchés par le condensât.
3. Utilisez seulement les garnitures de NPT pour les raccords filetés.
4. Lors du montage, utiliser le méplat pour clé de 32mm situé à l'entrée du purgeur.
5. Lors de l'installation électrique, respecter toutes les prescriptions en vigueur (VDE 0100).

ATTENTION!

Avant toute intervention de maintenance, mettre l'installation hors tension. Toute intervention électrique doit être réalisée exclusivement par un personnel qualifié et autorisé.

6. En cas de risque de gel, rajouter un chauffage thermostatique (accessoires).
7. Le Q MAT n'est opérationnel que s'il est sous tension.
8. Ne pas utiliser la touche Test pour une purge permanente.
9. Ne pas utiliser le Q MAT dans les atmosphères explosibles.
10. Utiliser exclusivement des pièces de rechange d'origine. Dans le cas contraire, la garantie est annulée.

Instruções de Segurança

1. Não exceder a pressão de serviço máxima (ver placa indicador das características).

ATENÇÃO!

Só efetuar trabalhos de manutenção com o aparelho isento de pressão.

2. Só utilizar material de instalação resistente à pressão. A tubagem de entrada dos condensados (1/2") tem que estar bem fixa. Um tubo flexível resistente à pressão, unido a um tubo rígido também resistente à pressão. Evite que pessoas ou objetos possam atingidos pela descarga do condensado.
3. Use somente os encaixes de NPT para as conexões enfiadas.
4. Para modular ou segurar de encontro durante a instalação, utilizar a caixa de chave (SW32) no ponto de afluência.
5. Executar a instalação eléctrica em concordância com todas as normas vigentes (VDE 0100).

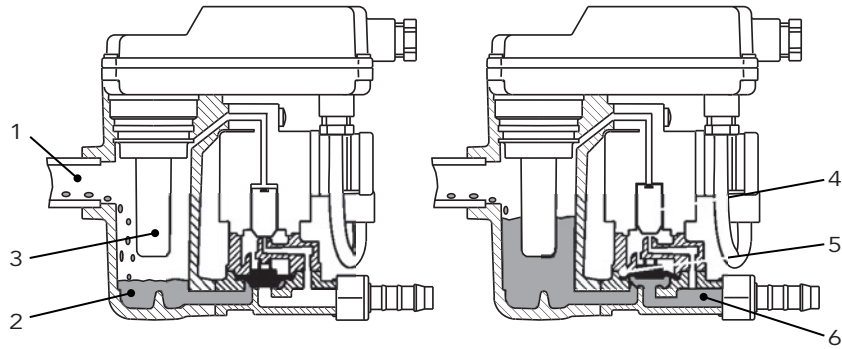
ATENÇÃO!

Só efetuar trabalhos de manutenção com o aparelho isento de pressão. Todos os trabalhos eléctricos só poderão ser executados por pessoal técnico autorizado.

6. Nas áreas onde há um perigo da geada, o dispositivo MAT de Q deve ser adaptado com um calefator termostática controlado (veja acessórios).
7. O Q MAT só funcionará se estiver ligado à corrente eléctrica.
8. Não utilizar o botão de teste para escoamento permanente.
9. Não utilizar o Q MAT em áreas potencialmente explosivas.
10. Só utilizar peças sobressalentes originais. Caso contrário, extinguirá a garantia.

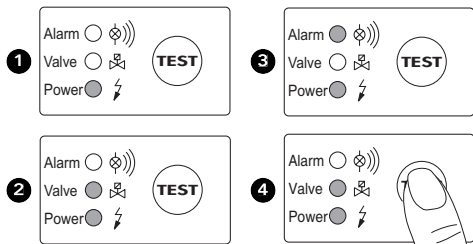
Function

The condensate flows through the feed line (1) into the Q MAT unit and accumulates in the container (2). A capacitive sensor (3) continuously registers the liquid level and passes a signal to the electronic control as soon as the container is filled. The pilot valve (4) is then activated and the diaphragm (5) opens the outlet line (6) for discharging the condensate.



When the Q MAT unit has been emptied, the outlet line is closed again quickly and tightly without wasting compressed air.

When the micro controller registers a malfunction, the device will automatically change to the alarm mode. The switching sequence of the valve continues until the fault is cleared (automatically or through maintenance). The red LED flashes as long as the device is in the alarm mode.



- 1 Ready for operation - Power on
 - 2 Discharge procedure - Outlet line open
 - 3 Malfunction - Alarm mode activated
 - 4 Test - Manual drainage/alarm
- To check for correct function using the test button:

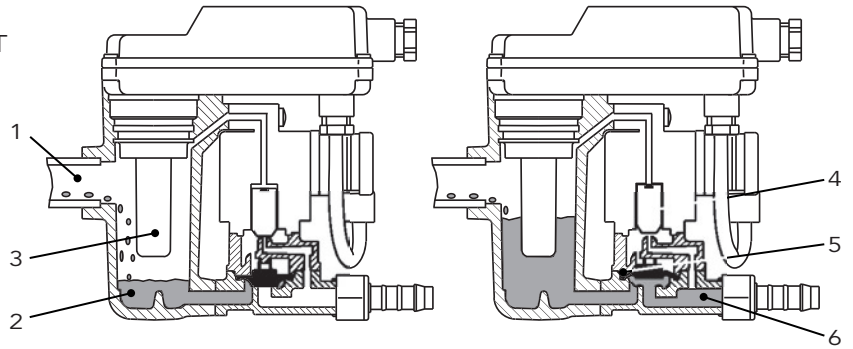
PRESS THE TEST BUTTON:	EFFECT:
SHORT	MANUAL DRAINAGE
> 1 MIN	ALARM MODE

Malfunctioning could be caused by:

- Mistakes during installation
- Dropping below the necessary minimum pressure
- Excessive condensate quantities (overloading)
- Blocked/shut off outlet line
- Extreme amount of dirt particles
- Frozen piping

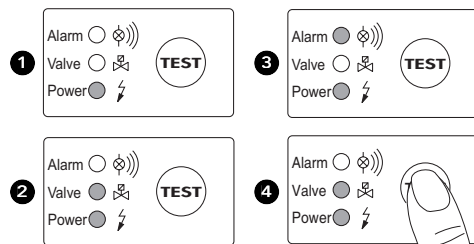
If the fault is not cleared within the first minute, a fault signal is triggered (see illustration) which can be picked off as a potential-free signal via the alarm relay. (24 Vdc version: pages 14-15)

El condensado fluye a través de la tubería de entrada (1) al Q MAT y se acumula en el depósito (2). El sensor capacitivo de nivel (3) controla permanentemente el nivel de llenado. Si el depósito está lleno, el sensor emite una señal a la unidad de pilotaje electrónico. Inmediatamente se acciona la válvula de pilotaje (4) y la membrana (5) abre la salida (6) para purgar el condensado.



En el momento en el que el Q MAT está vacío se cierra la salida herméticamente antes de que se produzca un escape de aire comprimido.

Si el microcontrolador detecta una perturbación en el funcionamiento, se activa el modo de alarma. La secuencia de actuación de la válvula dura hasta que la causa de la perturbación haya sido eliminada (por sí misma o por un mantenimiento). El LED rojo parpadea durante el estado de alarma.



- 1 En funcionamiento El aparato - está bajo tensión eléctrica
- 2 Procedimiento de descarga - La salida está abierta
- 3 Perturbación - El modo „ALARMA” está activado
- 4 Test - Purga manual/alarma
El interruptor de „TEST” sirve para el control del funcionamiento:

ACCIONAMIENTO:	RESULTADO:
RÁPIDO	PURGA MANUAL
>1 MIN	MODO DE ALARMA

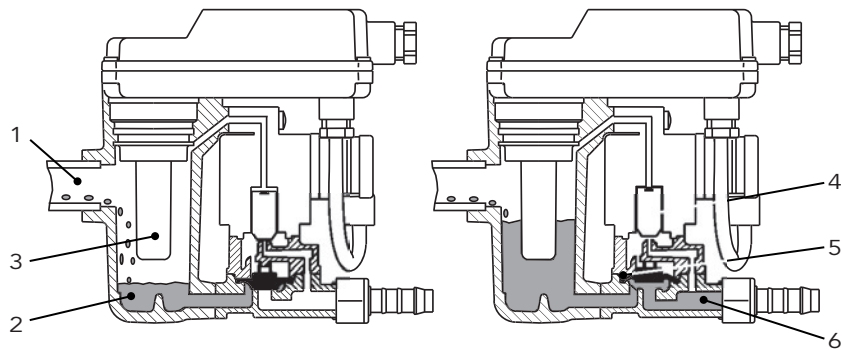
Posibles causas son:

- fallos en el montaje
- la presión está por debajo de la presión mínima indicada
- la cantidad de condensado es demasiado alta
- está taponada o cerrada la tubería de la salida
- cantidad extrema de partículas de suciedad
- tuberías heladas

Si la perturbación no está eliminada dentro del primer minuto, se activa el mensaje de la alarma (ver imagen), que puede ser transmitida como señal sin potencial a través del relé de alarma. (versión 24 Vcc: ver páginas 14-15)

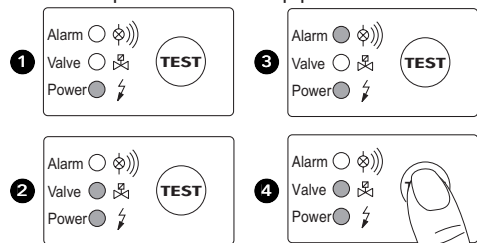
Fonctionnement

Amené dans le Q MAT par la conduite d'arrivée (1), le condensat est collecté dans le réservoir (2). Une sonde capacitive (3) surveille en permanence le niveau de remplissage et envoie un signal à la commande électronique dès que le réservoir est rempli. L'électrovanne pilote (4) est activée et la membrane (5) ouvre la conduite d'évacuation (6) pour l'écluser du condensat.



Dès que le Q MAT est vide, la conduite d'évacuation est à nouveau refermée avec une parfaite étanchéité, avant même que l'air comprimé ne puisse s'échapper.

Lorsque le microcontrôleur détecte une anomalie, il active le mode alarme. La séquence d'activation de la vanne persiste jusqu'à ce que le problème soit résolu (automatiquement ou par intervention de maintenance). La LED rouge clignote pendant la fonction d'alarme.



- 1 Prêt à fonctionner - Tension d'alimentation présente
- 2 Phase de purge - Conduite d'évacuation ouverte
- 3 Dysfonctionnement - Mode Alarme activé
- 4 Test - Purge manuelle/Alarme
La touche Test sert à tester le fonctionnement:

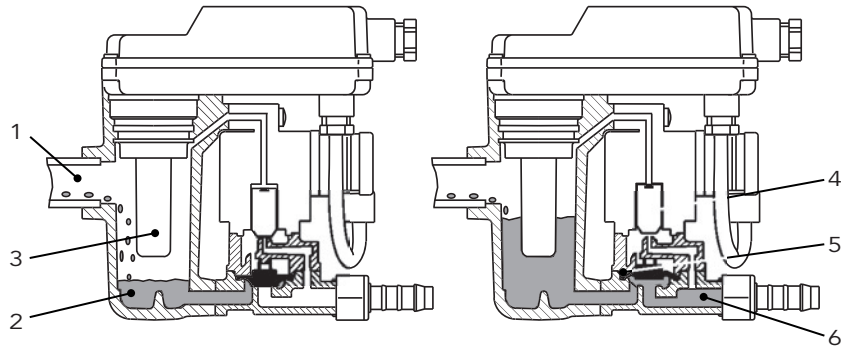
ACTION:	EFFET:
BRÈVE	PURGE MANUELLE
> 1 MIN	MODE ALARME

Causes de dysfonctionnement possibles:

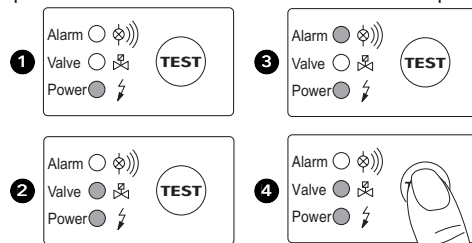
- Défaut au niveau de l'installation
- Pression minimale non atteinte
- Trop de condensat (surcharge)
- Ecoulement bouché ou obturé
- Importantes quantités d'impuretés
- Conduites gelées

Si la panne n'est pas résolue en l'espace d'une minute, un signal d'alarme est émis (voir figure). Un signal sans potentiel est délivré par le relais d'alarme. (Version 24 Vdc: voir pages 14-15)

O condensado corre através do tubo adutor (1) para dentro do Q MAT e acumula-se no interior da caixa (2). Um sensor que trabalha capacitivamente (3) vai continuamente registando o nível, transmitindo um sinal ao comando electrónico logo que o depósito se encher de condensado. A válvula de comando piloto (4) é accionada e o diafragma (5) abre o tubo de descarga (6) para escoamento do condensado.



Esvaziado o Q MAT, o tubo de descarga é de novo fechado hermeticamente a tempo para evitar perdas desnecessárias de ar comprimido.



- 1 Estado de prontidão para entrar - em funcionamento Tensão aplicada
- 2 Processo de descarga - Tubo de descarga está aberto
- 3 Avaria - Modo de alarme está activado
- 4 Teste - Drenagem manual/alarme O botão de teste é utilizado para controlar o funcionamento:

ACCIONAMENTO:	EFEITO:
CA. 2 SEG.	DRENAGEM MANUAL
>1 MIN	MODO DE ALARME

Quando o microcontrolador verifica uma avaria, o alarme é activado. A sequência de ligação da válvula permanece activada até se eliminar a avaria (automaticamente ou através de manutenção). O LED vermelho pisca durante a função de alarme.

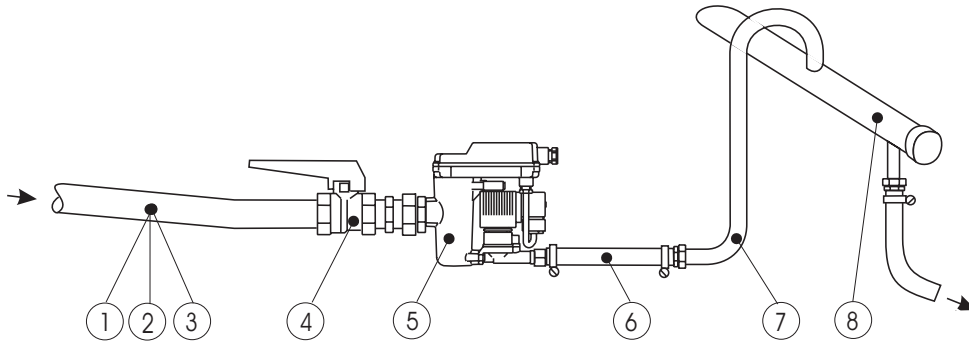
Causas possíveis da avaria são:

- erro na instalação
- pressão inferior à pressão mínima admissível
- quantidade excessiva de condensado (sobrecarga)
- tubo adutor entupido/passagem impedida
- quantidade excessiva de partículas de sujidade
- tubagens geladas

Se a falha não for eliminada durante o primeiro minuto, o aparelho activa o sinal de alarme (ver imagem), que poderá ser comutado em sinal isento de potencial através do relé do sinal.

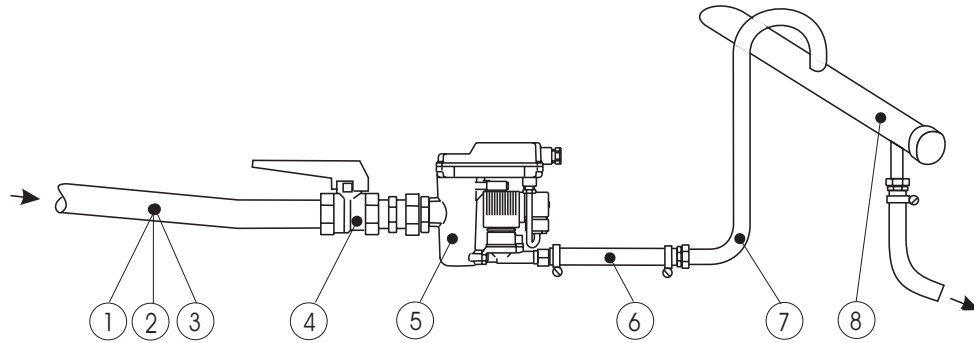
(Versão 24 Vdc: ver páginas 14-15)

Installation • Instalación



1. Feed pipe and fitting at least ½".
(internal dia > 0,51 inch)
2. No filters in feed line
3. Slope in feed line > 1%.
4. Only use ball valves.
5. Pressure: min. 12 psig or 18 psig.
(check type plate for correct pressure)
6. Short pressure hose.
7. For each yard of rising slope in the outlet line, the required minimum pressure will increase by 1.5 psig.
The rise of the outlet line must not exceed 17 feet.
8. Collecting line min. ½" with 1% slope
9. In the case of inflow problems, install venting line.

1. Tubería de entrada y piezas de conexión mín. ½".
(diámetro interior <_13mm).
2. No ponga ningún filtro en la tubería de entrada
3. La tubería de la entrada tiene que tener una pendiente descendente constante >1%
4. Utilice solamente llaves de paso esféricas
5. Presión de funcionamiento mín. 0,8 bar o 1,2 bar (lea la presión indicada en la etiqueta de identificación)
6. Tubo a presión corto
7. Por cada metro que asciende la tubería de salida, se incremento la presión mínima de funcionamiento en 0,1 bar.
Subida máxima de la tubería de salida: 5m
8. Tubería colectara de los condensados: mín. ½" con pendiente descendente constante 1%
9. Si existieran problemas de entrada, instalar una tubería de ventilación.



1. Tube d'amenée, au moins ½".
(Diamètre intérieur > 13 mm)
2. Pas de filtre sur l'amenée.
3. Pente de l'amenée >1%.
4. Utiliser uniquement des vannes à boisseau sphérique.
5. Pression : minimum 0,8 ou 1,2 bar.
(relever la pression sur la plaque)
6. Flexible pression de faible rongeur.
7. Pour chaque mètre de pente montante sur la conduite d'évacuation, il faut augmenter la pression minimale requise de 0,1 bar. Évacuation: longueur max. de la partie montante : 5m.
8. Conduite collectrice :
Au minimum ½" avec 1% de pente.
9. La conduite d'écoulement doit être raccordée par un col de cygne sur la conduite collectrice

1. Diâmetro mínimo do tubo e acessórios adutor ½".
(diâmetro interno <_ 13mm)
2. Não montar filtros no tubo adutor.
3. Declive de afluência >1%.
4. Só utilizar válvulas esféricas.
5. Pressão: no mínimo 0,8 ou 1,2 bar.
(Ver pressão indicado na placa indicador das características)
6. Tubo flexível curto.
7. Por cada metrô de subida no tubo de descarga, a pressão mínima necessária vai aumentando em 0,1 bar. O tubo de descarga não deve exceder 5m de subida.
8. Assentar tubagem colectora com diâmetro mínimo de ½" e 1% de declive.
9. Em caso de problemas de afluência, instalar um tubo de evacuação do ar.

Installation • Instalación

Incorrect • no correcto

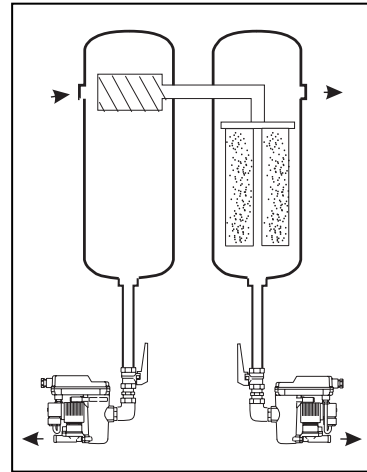
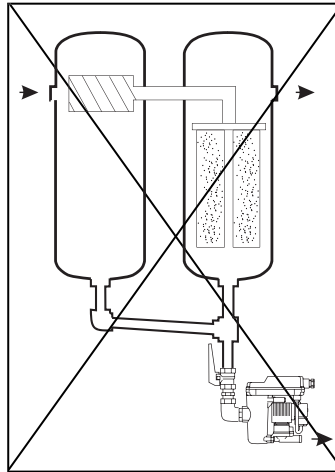
Correct • correcto

Note: Pressure differences

Each condensate source must be drained separately.

Observe: diferencial de presión

Se tiene que purgar por separado cada punto de purga.

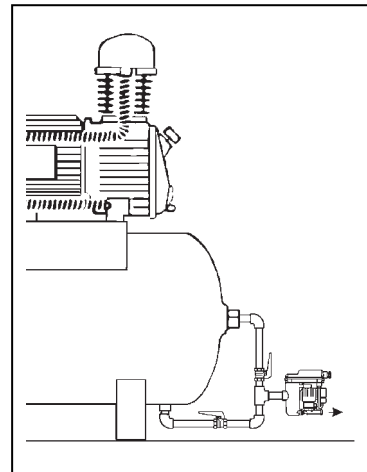
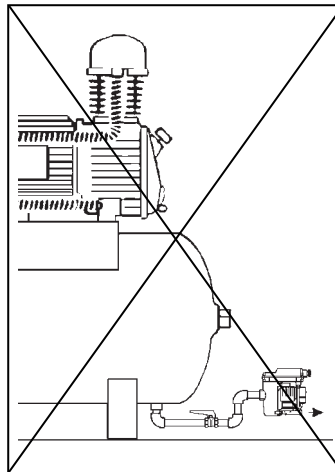


Note: Venting

If the feed line cannot be laid with sufficient slope or if there are other inflow problems, a venting line must be installed.

Observe: compensación

Si no hay suficiente pendiente descendente constante en la tubería de la entrada o si existieran otros problemas de entrada, se tiene que montar una tubería de compensación.

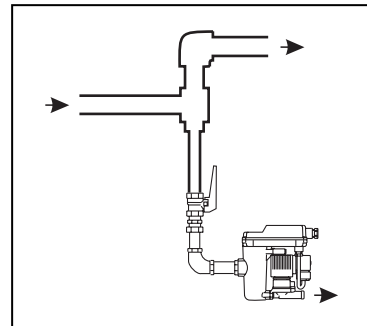
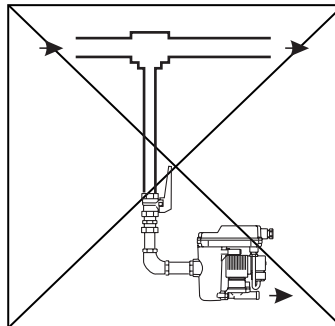


Note: Deflector area

If drainage is to take place directly from a line, it is advisable to arrange the piping so that the air flow is diverted.

Observe: separación de los condensados

Si se quiere purgar una tubería, es mejor, si se realiza una desviación de la corriente de aire comprimido.



Incorrect • incorrecto

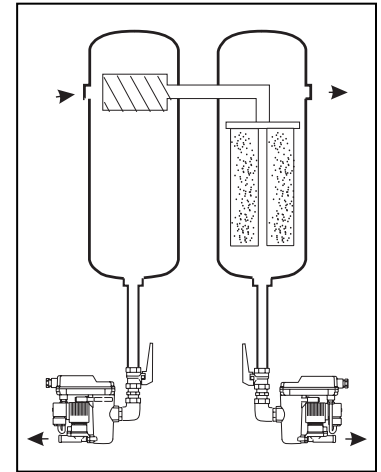
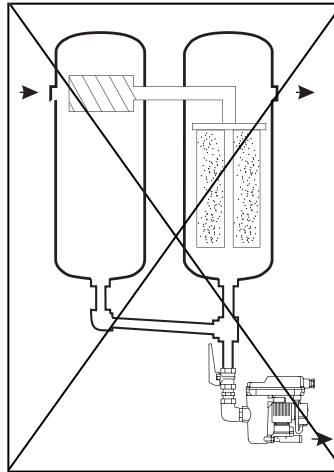
Correct • correcto

Important: différences de pression

Chaque point de soutirage de condensât doit être purgé individuellement.

Importante: diferenças de pressão

Cada fonte de condensado terá que ser drenada separadamente.

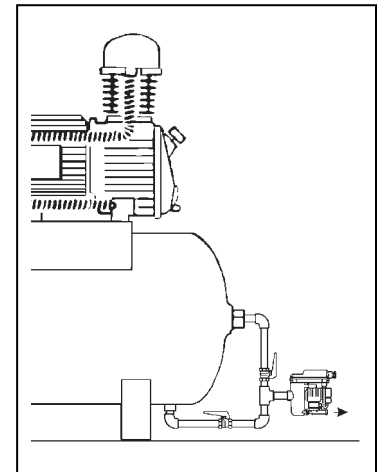
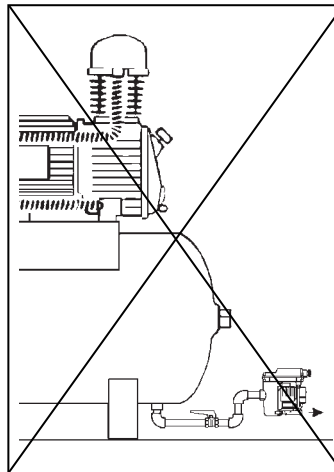


Important : équilibrage d'air

Si la pente de l'amenée n'est pas suffisante, il faut poser une conduite d'équilibrage d'air.

Importante: evacuação do ar

Se o declive da afluência não for suficiente, ou se houver outros problemas de afluência deve montares um tubo de ventilação.

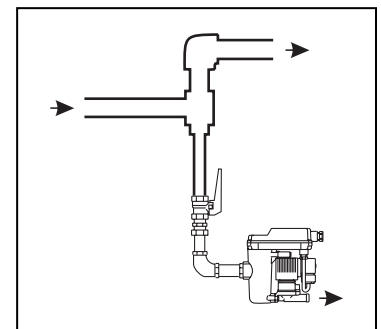
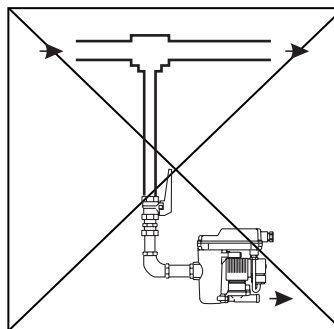


Important : chicane

Si la purge doit s'effectuer directement sur la tuyauterie, il faut prévoir une chicane pour que le condensât ne soit pas entraîné par le débit d'air comprimé.

Importante: desvio instalação na tubagem

Quando se pretende purgar uma tubagem, é preferível instalar o purgador conforme desenho.



Installation • Instalación

Incorrect • no correcto

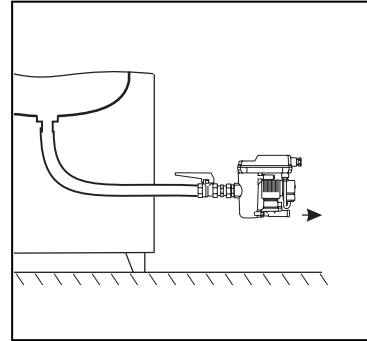
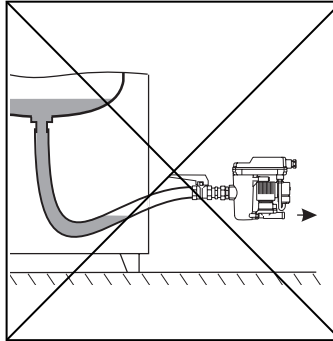
Correct • correcto

Note: Continuous slope

It is important to avoid water pockets when using a pressure hose as a feed line.

Observe: pendiente descendente constante

Si se emplea como entrada un tubo flexible, se tiene que evitar que se forme un sifón.

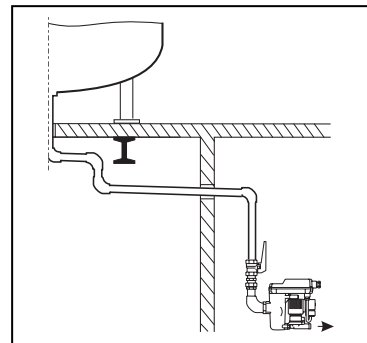
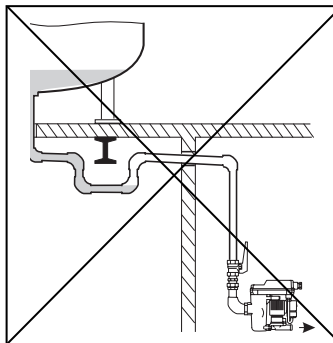


Note: Continuous slope

Water pockets must also be avoided when laying a feed pipe.

Observe: pendiente descendente constante

Si se emplea como entrada un tubo rígido, se tiene que evitar que se forme un sifón.



Incorrect • incorrecto

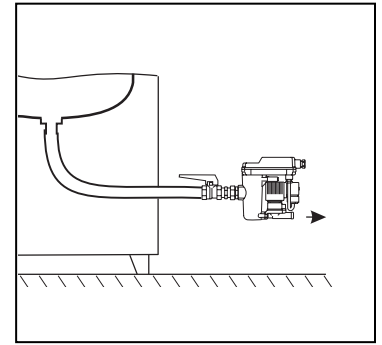
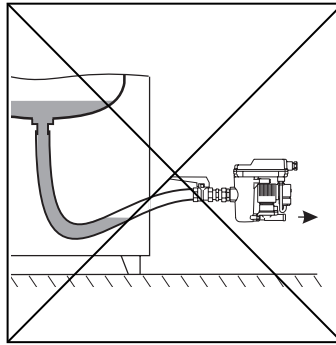
Correct • correcto

Important: pente continue

Si l'amenée est réalisée au moyen d'un flexible, il faut éviter toute "retenue d'eau" .

Importante: declive contínuo

Quando se utiliza um tubo flexível para a entrada do condensado, tem que se evitar a formação de um sifão.

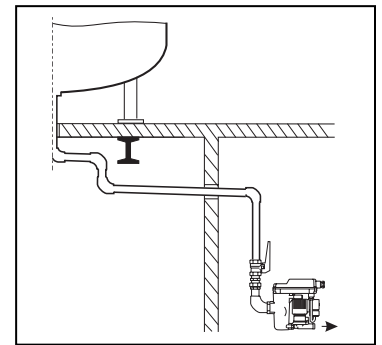
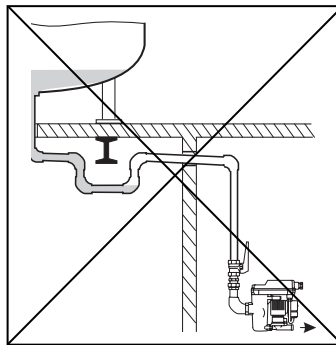


Importante: pente continue

Des poches de l'eau doivent également être évitées en posant un tube d'alimentation.

Importante: declive contínuo

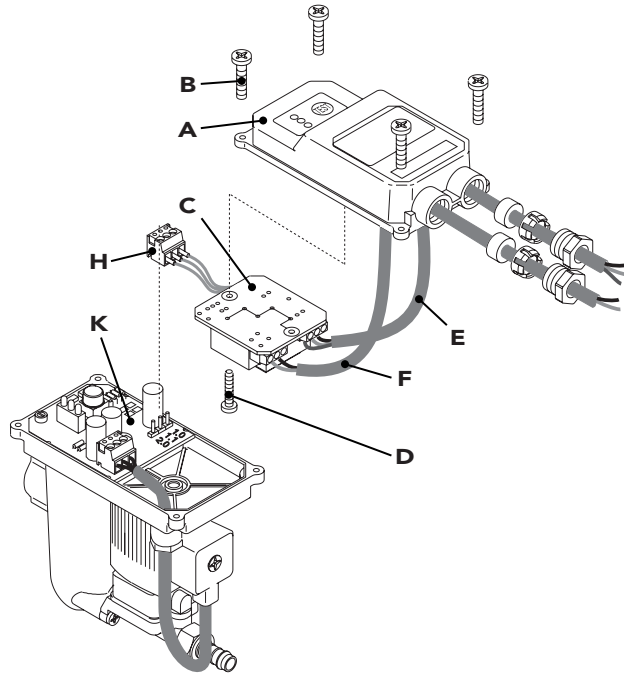
Quando se utiliza um tubo rígido para a entrada do condensado, tem que se evitar a formação de um sifão.



Electrical Installation

- Lift off domed cover (A) after removing the 4 screws (B).
- Take power supply board (C) out of the domed cover (A) after removing the screw (D).
- Guide cables for power supply (E) and potential-free contact (F) through screwed cable fittings.
- Terminals - Check type plate (G) for permissible mains voltage and ensure conformity.

In the case of 24 Vdc operation, do not connect +24 Vdc to frame because the internal housing potential of the device is negative.

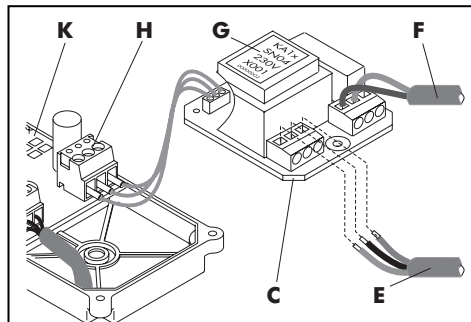


- Connect potential-free contact (F) to terminals 0.6 - 0.7 (fail safe) or 0.7 - 0.8 (open during malfunction).
- Pull cable (E + F) tight and screw down cable fittings.
- Screw power supply board (G) with screw (D) into domed cover (A).
- Plug ribbon cable (H) into control PCB (K).
- If the individual wires have not been screwed into the plug, they should be attached as follows:
1.0 = brown
1.1 = blue
2.0 = black
- Put on top of cover (A) and tighten the 4 screws (B).

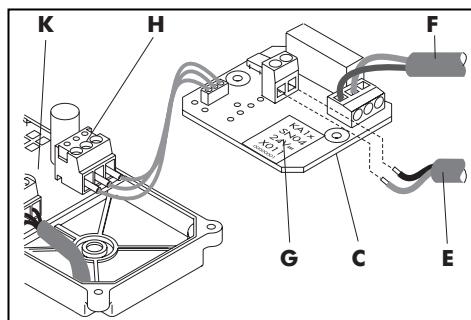
The power supply board (C) is in a reverse position (upside down) in the domed cover (A).

During no-load operation, a voltage of up to 36 Vdc may be measured at terminals 1.0 and 1.1 (plug ribbon cable (H)).

Please ensure that the installation is carried out according to the valid regulations.



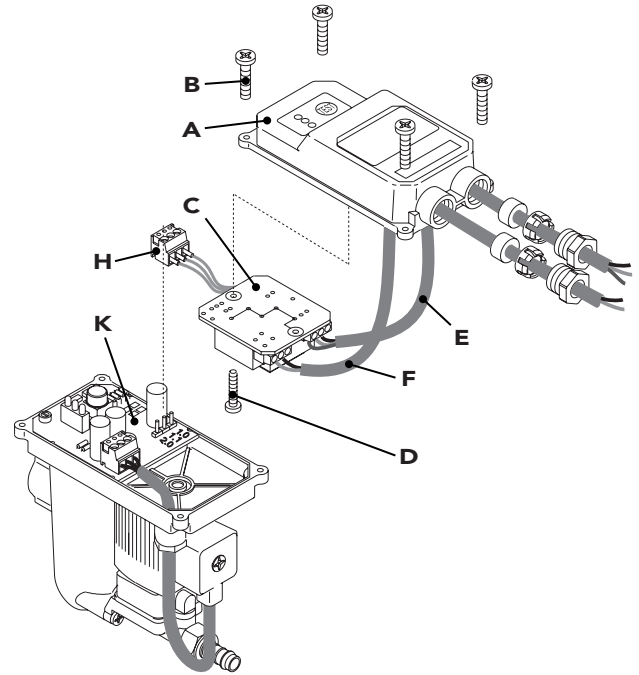
VAC - VOLTAGES		
0.8	[Switch symbol]	NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
0.2	PE	EARTH/GROUND
0.1	N	NEUTRAL
0.0	L	PHASE



24 VDC - VOLTAGES		
0.8	[Switch symbol]	NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
+24V		+24 VDC (0V)
+24V		0V (+24 VDC)

- desmonte la tapa (A) superior (4 tornillos (B))
- desmonte el circuito impreso de la fuente de alimentación de la tapa (A) superior (1 tornillo (B))
- guíe los cables a través de las tuercas correspondientes
- Bornes - Verifique la tensión admisible en la etiqueta de identificación (G).

En caso de servicio con 24 Vdcno se deberá conectar la masa + (plus) 24 Vdc, puesto que en el interior del aparato el negativo está conectado al potencial de carcasa.



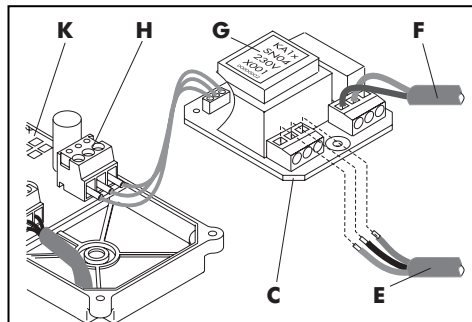
- conecte los contactos libres de potencial (F) a los bornes 0.6 - 0.7 (en alarma cerrado) o 0.7 - 0.8 (en alarma abierto)
- tense el cable y fijelo con los tornillos correspondientes
- monte el circuito impreso de la fuente de alimentación
- conecte el conector de cable plano en el circuito de pilotaje
- Si los cables aislados fueron desatornillados erròneamente del conector, es vÀlida la siguiente asignaciòn:

- 1.0 = marròn
- 1.1 = azul
- 2.0 = negro

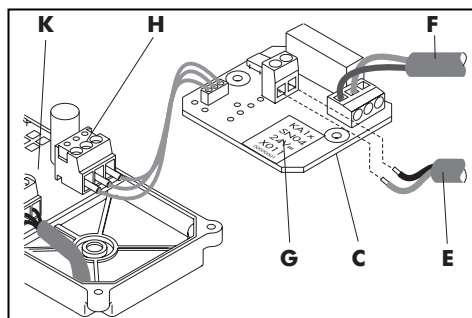
El circuito impreso de la fuente de alimentaciòn estÀ girado hacia abajo y fijado dentro de la tapa superior.

En el funcionamiento sin carga se puede medir una tensiòn de hasta 36 Vcc entre los bornes 1.0 y 1.1.

Ejecute la instalaciòn elÈctrica segùn las normas vigentes.



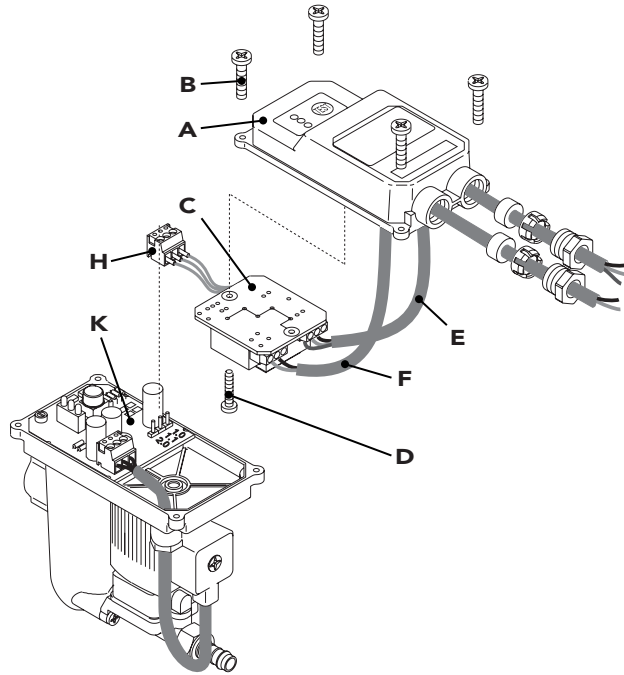
VAC - VOLTAGES		
0.8		NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
0.2	PE	EARTH/GROUND
0.1	N	NEUTRAL
0.0	L	PHASE



24 VDC - VOLTAGES		
0.8		NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
+24V	+24V	+24 V _{DC} (0V)
+24V	0V	0V (+24 V _{DC})

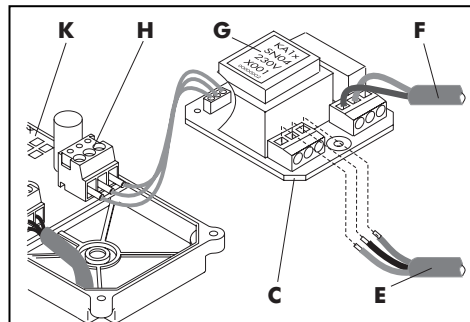
Installation électrique

- Démontez le capot (A), après avoir dévissé les 4 vis (B)
- Retirez la carte d'alimentation (C) du capot (A), après avoir dévissé la vis (D)
- Enfiler à travers les presse-étoupes, les câbles pour l'alimentation électrique (E) et le contact sans potentiel (F)
- Bornes - Respecter impérativement la tension secteur admissible, mentionnée sur la plaque signalétique (G).



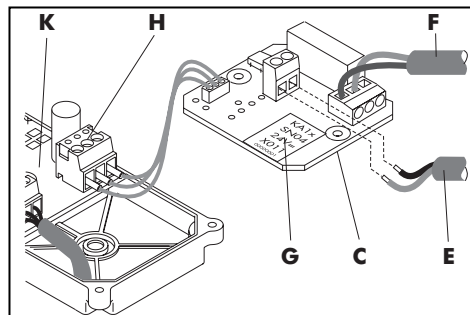
En cas d'alimentation 24 Vdc, la masse ne doit pas être reliée au +24 Vdc étant donné qu'à l'intérieur de l'appareil le moins est au potentiel du boîtier.

- Raccorder le contact sans potentiel (F) aux bornes 0.6 - 0.7 (fermé en cas de panne) ou 0.7 - 0.8 (ouvert en cas de panne)
- Tendre les câbles (E + F), puis serrer les presse-étoupes
- Revisser la carte d'alimentation (C) avec la vis (D) dans le capot (A)
- Enficher le câble en nappe (connecteur) (H) sur la carte de commande (K)
- Au cas où les différents fils seraient pinadvertance dissociés de la fiche, respecter la répartition suivante:
1.0 = marron
1.1 = bleu
2.0 = noir
- Mettre le capot (A) en place et visser les 4 vis (B)



VAC - VOLTAGES		
0.8		NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
0.2	PE	EARTH/GROUND
0.1	N	NEUTRAL
0.0	L	PHASE

La carte d'alimentation (C) est à l'envers dans le capot (A). A vide, on peut relever aux bornes 1.0 et 1.1 (câble en nappe connecteur (H)) une tension pouvant atteindre 36 Vdc.

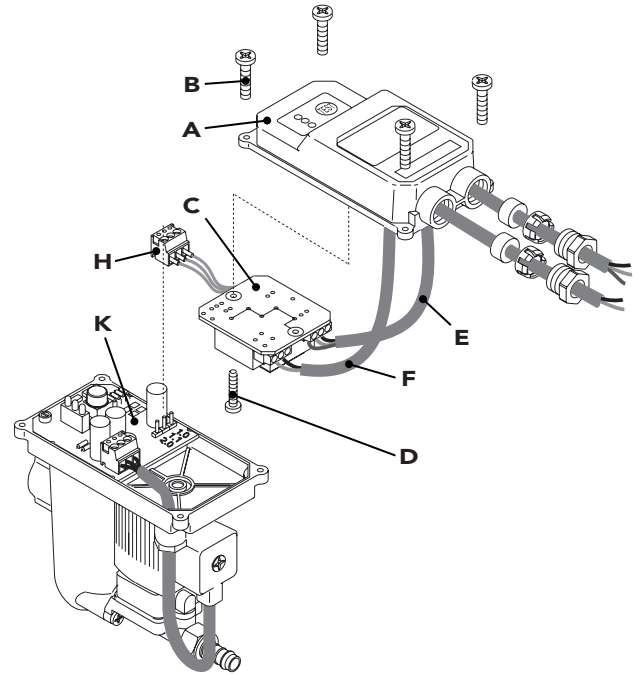


24 VDC - VOLTAGES		
0.8		NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
+24V	+24V	+24 VDC (0V)
+24V	0V	0V (+24 VDC)

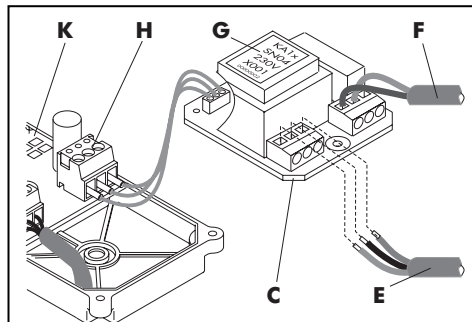
Exécuter les travaux d'installation conformément à VDE 0100.

- Desaparafusar os 4 parafusos para desmontar a tampa da caixa.
- Desaparafusar o parafuso da placa de alimentação a partir da rede e retirá-la da tampa.
- Meter o cabo para a alimentação de tensão e o contacto isento de potencial através das entradas ros cadas dos cabos.
- Bornes - Ver impreterivelmente a tensão de rede permitida na placa indicador

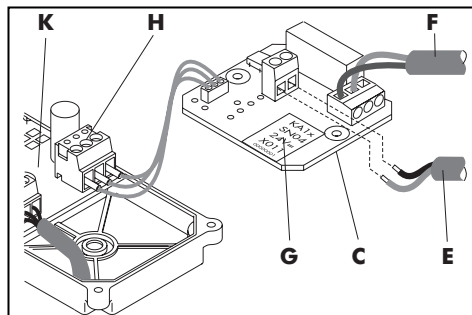
Em caso de operção com 24 Vdc não ligar a massa a + (plus) 24 Vdc porque a polarização negativa interna do aparelho está ligada ao potencial da carcaça.



- Ligar o contacto isento de potencial aos bornes 0.6 - 0.7 (fechado em caso de avaria) ou 0.7 - 0.8 (aberto em caso de avaria).
- Esticar o cabo e fechar firmemente as entradas dos cabos por meio dos parafusos-bujões.
- Aparafusar a placa com o equipamento de alimentação na tampa da caixa.
- Meter o cabo em fita (ficha) na placa de comando.
- Se, por engano, os fios isolados forem desapertados da ficha do cabo, é aplicável a seguinte disposicao:
1.0 = castanho
1.1 = azul
2.0 = preto
- Colocar a tampa na caixa e fixála firmemente com os 4 parafusos.



VAC - VOLTAGES		
0.8		NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
0.2	PE	EARTH/GROUND
0.1	N	NEUTRAL
0.0	L	PHASE



24 VDC - VOLTAGES		
0.8		NORMALLY OPEN
0.7		COMMON
0.6		NORMALLY CLOSED
+24V	+24 VDC (0V)	
+24V	0V (+24 VDC)	

A placa da fonte de alimentação está colocada ao inverso na tampa (parte de cima virada para baixo).

Em operação sem carga, podese medir nos bornes 1.0 e 1.1 uma tensão de 36 Vdc.

Efectuar a instalação de acordo com as normas VDE 0100.

Electrical Data

	230/110/24/V _{AC}	24 V _{DC}
MAX. POWER INPUT	P < 2,0 VA	P < 2,0 W
SUPPLY VOLTAGE (SEE TYPE PLATE)	U _{AC} = ±10% - 50/60 Hz	U ₀ = 24V _{DC} -10/+25%
RECOMMENDED CABLE JACKET DIAMETER	5,8 - 8,5 MM	
CABLE CROSS-SECTION AND FUSE PROTECTION	3 x 0,75 MM ² / 5 x 0,25 MM ²	
	0,5 A *	100 MA */**
CONTACT LOADING	<250V _{AC} /<0,5A	>12V _{DC} />50mA

* TIME LAG / LENTO / TEMPORISÉE / DE AÇÃO MÉDIA LENTA

** MINIMUM INTERNAL RESISTANCE OF VOLTAGE SOURCE R_I > 12 Ω_{HM}

Potential-free contact

The alarm signal can be relayed via a potential-free contact. The changeover contact can be operated, e.g., in the fail-safe mode.

When operating voltage is being applied and the Q MAT device is functioning correctly, the alarm relay is energized. The contact element (0.7 - 0.8).

When there is no operating voltage or in the case of a fault signal, the alarm relay drops out. The contact element is open (alarm).

External test button (optional)

Here, the normal test button function has been extended for additional use outside the Q MAT unit. This makes it possible to discharge any condensate in the unit by remote control, if required. When the external contact closes, the valve will open.

Características eléctricas

	230/110/24/V _{AC}	24 V _{DC}
ABSORBIDA Y FUSIBLE RECOMENDADO	P < 2,0 VA	P < 2,0 W
TENSIÓN DE ENTRADA (VER ETIQUETA IDENTIFICATIVA)	U _{AC} = ±10% - 50/60 Hz	U ₀ = 24V _{DC} -10/+25%
DIÁMETRO EXTERIOR DEL CABLE RECOMENDADO	5,8 - 8,5 MM	
SECCIÓN DE CABLE Y FUSIBLE	3 x 0,75 MM ² / 5 x 0,25 MM ²	
	0,5 A *	100 MA */**
CARGA DEL CONTACTO	<250V _{AC} /<0,5A	>12V _{DC} />50MA

* LENTO

** RESISTENCIA INTERNA DE LA FUENTE DE TENSIÓN MÍNIMA

Contacto libre de potencial

A través del contacto libre de potencial se puede transmitir la señal de alarma. El contacto se puede conectar p.ej. de modo „fail-safe“:

Si hay tensión eléctrica y el Q MAT trabaja sin perturbación, el relé de alarma está exitado. El contacto de trabajo (0.7 - 0.8) está cerrado.

Si no hay tensión eléctrica o se produce la señal de alarma, el relé se abre. El contacto de trabajo está abierto (alarma).

Pulsador de "Test" externo (opcional)

Posibilidad de purgar condensado por control remoto. Hay contactos de la función de "TEST". La purga es realizada cuando se cierra el contacto externo.

Caractéristiques électrique

	230/110/24/V _{AC}	24 V _{DC}
CONSOMMATION MAXIMALE	P < 2,0 VA	P < 2,0 W
ALIMENTATION ÉLECTRIQUE (VOIR PLAQUE SIGN.)	U _{AC} = ±10% - 50/60 Hz	U ₀ = 24V _{DC} -10/+25%
DIAMÈTRE RECOMMANDÉ POUR LA GAINÉ DU CÂBLE	5,8 - 8,5 mm	
SECTION DES FILS ET FUSIBLES	3 x 0,75 mm ² / 5 x 0,25 mm ²	
	0,5 A *	100 mA */**
POUVOIR DE COUPURE	<250V _{AC} /<0,5A	>12V _{DC} />50mA

* TEMPORISÉE / DE AÇÃO MÉDIA LENTA

** RÉSISTANCE INTERNE MIN. DE LA SOURCE DE TENSION R_i > 12 OHM

Contact sans potentiel

Un contact sans potentiel permet le report de l'alarme. Le contact inverseur peut être exploité par exemple en mode fail-safe:

Si la tension de service est présente et si le Q MAT fonctionne normalement, le relais d'alarme est excité. Le contact de travail (0.7 - 0.8) est fermé.

Si la tension d'alimentation n'est pas présente ou si un signal d'alarme est émis, le relais d'alarme est désexcit. Le contact de travail est ouvert (Alarme).

Button test externe (en option)

Celui-ci permet d'effectuer une commande à distance de la purge. La fonction normale de la touche Test est ainsi reportée sur un contact externe. Lorsque ce contact est fermé, la vanne s'ouvre.

Dados elétricos

	230/110/24/V _{AC}	24 V _{DC}
POTÊNCIA MÁX. ABSORVIDA	P < 2,0 VA	P < 2,0 W
TENSÃO DE REDE (VER PLACA INDICADORA)	U _{AC} = ±10% - 50/60 Hz	U ₀ = 24V _{DC} -10/+25%
DIÂMETRO RECOMENDADO DO INVÓLUCRO DE CABO	5,8 - 8,5 mm	
SECÇÃO DO CABO E FUSÍVEL RECOMENDADO	3 x 0,75 mm ² / 5 x 0,25 mm ²	
	0,5 A *	100 mA */**
CARGA DE CONTATO	<250V _{AC} /<0,5A	>12V _{DC} />50mA

* DE AÇÃO MÉDIA LENTA

** RESISTÊNCIA MIN. INTERIOR DA FONTE DE TENSÃO

Contacto isento de potencial

O sinal de alarme pode ser transmitido através de um contacto isento de potencial. O contacto de comutação pode ser operado, p. ex., no modo à prova de falhas:

Quando há tensão de serviço e quando o Q MAT trabalha sem perturbações, o relé de alarme está atraído. O contacto de trabalho (0.7 - 0.8) está fechado.

Quando não há tensão de serviço ou quando o aparelho dá sinal de falha, o relé de alarme cai para baixo, abrindo o contacto de trabalho (alarme).

Tecla de teste externo (opção)

Esta tecla permite efectuar um comando à distância da purga. A função normal da tecla de teste foi ampliada para uso adicional fora do Q MAT. Quando o contacto externo é fechado, a válvula abre-se.

Maintenance

Maintenance recommendation:

- Housing and valve should be cleaned once a year.
- Replace wear parts once a year.

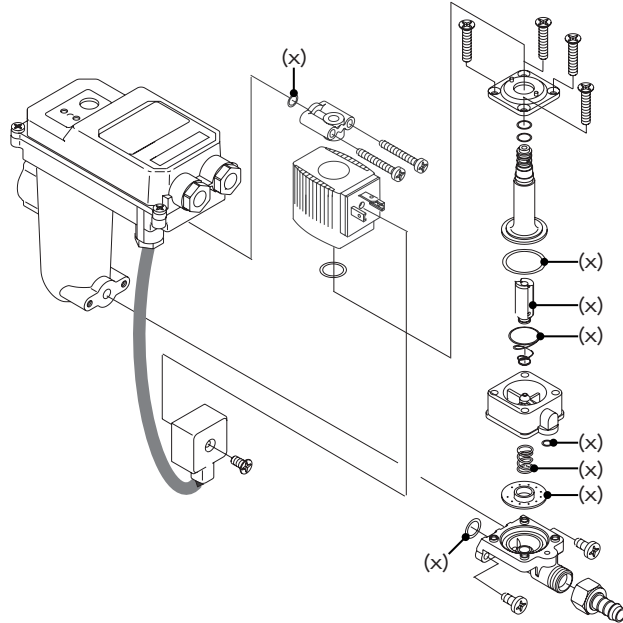
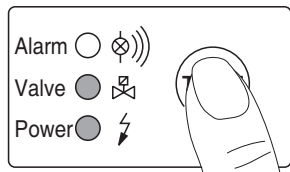
WEAR PARTS KITS (X)	
Q MAT 03	2000049
Q MAT HP 1000	2000748

Functional test of Q MAT device:

- Press test button for 2 seconds.
- Valve opens for condensate discharge.

To check alarm signal:

- Shut off condensate inflow.
- Press test button for at least 1 minute.
- Red LED flashes (after 1 minute).
- Alarm signal is being relayed.



Mantenimiento

Recomendaciones para el mantenimiento:

- anualmente limpia la carcasa y la válvula
- anualmente cambie los elementos de desgaste

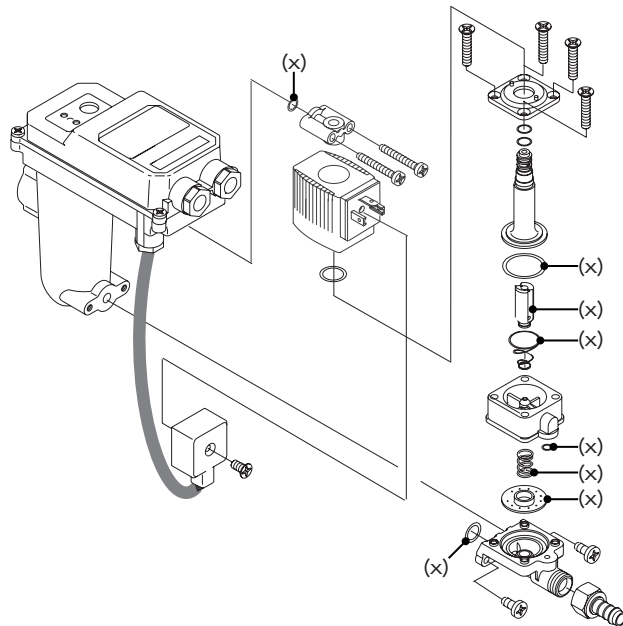
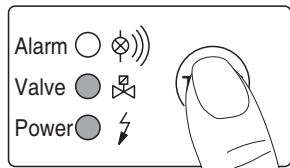
KIT DE PIEZAS DE DESGASTE (X)	
Q MAT 03	2000049
Q MAT HP 1000	2000748

Control del funcionamiento del Q MAT:

- Accione el pulsador de TEST durante unos segundos.
- La válvula abre para la evacuación del condensado.

Control del mensaje de alarma:

- cierre la entrada de los condensados
- accione el pulsador de „TEST“ durante 1 minuto
- el LED rojo parpadea (después de 1 min)
- la señal de alarma se conecta



Recommandations pour l'entretien:

- 1 fois par an, nettoyer le boîtier et la soupape
- 1 fois par an, remplacer les pièces d'usure

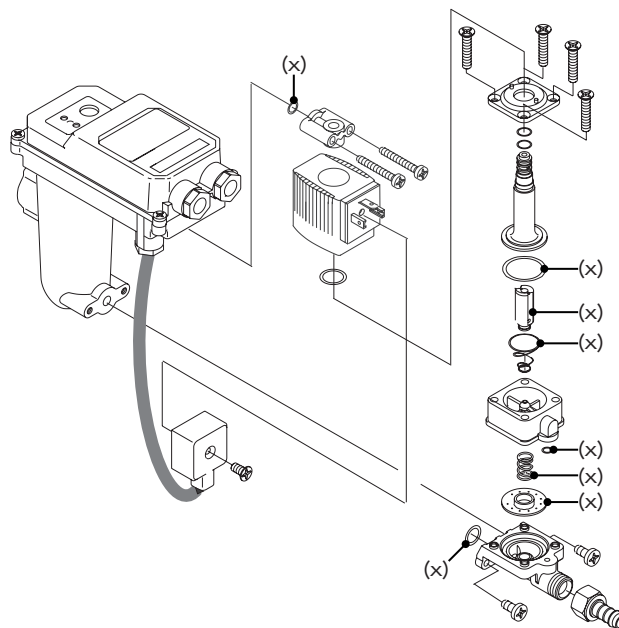
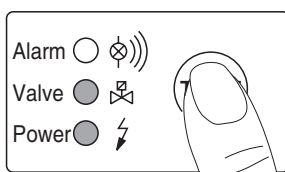
KIT DE PIÈCES D'USURE (X)	
Q MAT 03	2000049
Q MAT HP 1000	2000748

Test de fonctionnement du Q MAT:

- Pression brève sur la touche Test 2 sec.
- La soupape s'ouvre pour la purge

Vérification du signal d'alarme:

- Obturer l'arrivée de condensat
- Presser la touche Test pendant 1 minute au moins
- La LED rouge clignote (après 1 min.)
- Le signal d'alarme est activé



Manutenção

Recomendação de manutenção:

- limpar todos os anos a caixa e a válvula
- limpar todos os anos a caixa e a válvula

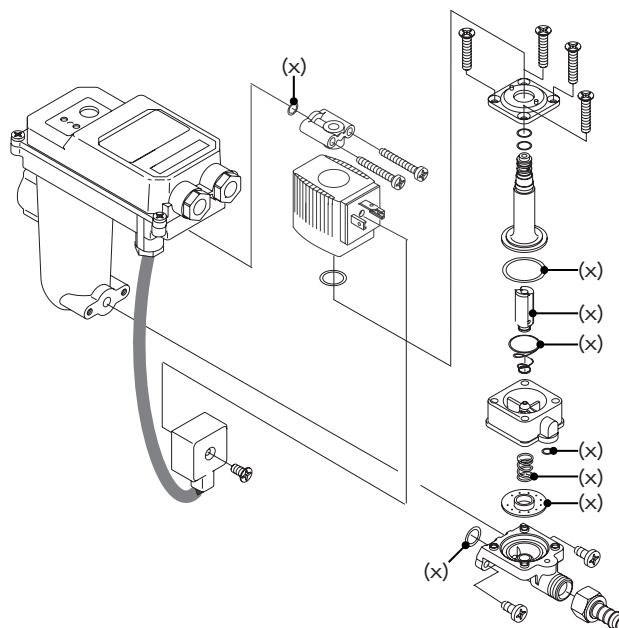
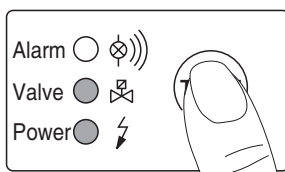
JOGO DE PEÇAS DE DESGASTE (X)	
Q MAT 03	2000049
Q MAT HP 1000	2000748

Testar o funcionamento do Q MAT:

- Premir brevemente o botão de teste.
- A válvula abre-se para escoamento do condensado.

Controlar o sinal de alarme:

- Fechar a afluência de condensado.
- Premir pelo menos 1 minuto o botão de teste.
- LED vermelho pisca (passado 1min)
- O sinal de alarme é activado.



Troubleshooting

LED NOT LIGHTING UP:

POSSIBLE CAUSES:

- POWER SUPPLY FAULTY
POWER SUPPLY BOARD DEFECTIVE
CONTROL PCB DEFECTIVE
- CHECK VOLTAGE ON TYPE PLATE.
 - CHECK VOLTAGE ON POWER SUPPLY BOARD AT TERMINALS 0.0, 0.1, 0.2.
 - CHECK 24 VDC VOLTAGE ON CONTROL PCB AT TERMINALS 1.0, 1.1 (WITHOUT LOAD, UP TO 36 VDC MAY BE MEASURED)
 - CHECK PLUG CONNECTION/RIBBON CABLE
-

NO CONDENSATE DISCHARGE WHEN TEST BUTTON IS PRESSED:

- FEED AND/OR OUTLET LINE SHUT OFF OR BLOCKED
WORN PARTS (SEALS, VALVE CORE, DIAPHRAGM)
CONTROL PCB DEFECTIVE
SOLENOID VALVE DEFECTIVE
- CHECK FEED LINE AND OUTLET LINE
 - REPLACE WORN PARTS
 - CHECK IF VALVE OPENS AUDIBLY (PRESS TEST BUTTON SEVERAL TIMES)
 - CHECK 24 VDC VOLTAGE ON CONTROL PCB AT TERMINALS 1.0, 1.1 (WITHOUT LOAD, UP TO 36 VDC MAY BE MEASURED)
-

CONDENSATE DISCHARGE ONLY WHEN TEST BUTTON IS PRESSED:

- FEED LINE WITH INSUFFICIENT SLOPE
EXCESSIVE CONDENSATE QUANTITIES
SENSOR TUBE EXTREMELY DIRTY
DROPPING BELOW NECESSARY MINIMUM PRESSURE
- LAY FEED LINE WITH ADEQUATE SLOPE
 - INSTALL VENTING LINE
 - CLEAN SENSOR TUBE
 - ENSURE MINIMUM PRESSURE, OTHERWISE INSTALL LOW-PRESSURE OR VACUUM CONDENSATE DRAIN
-

DEVICE KEEPS BLOWING OFF AIR:

- CONTROL AIR LINE BLOCKED
WORN PARTS (SEALS, VALVE CORE, DIAPHRAGM)
- CLEAN ENTIRE VALVE UNIT
 - REPLACE WORN PARTS
 - CLEAN SENSOR TUBE
-

NINGÚN LED ESTÁ ILUMINADO:

POSIBLES CAUSAS:

TENSIÓN DE LA ENTRADA NO CORRECTA

FUENTE DE ALIMENTACIÓN DEFECTUOSA

CIRCUITO DE PILOTAJE DEFECTUOSO

- Compruebe el voltaje en el tipo placa.
- Compruebe el voltaje en tablero de la fuente de alimentación en los terminales 0.0, 0.1, 0.2.
- Compruebe la tensión de 24 V_{CC} del circuito de pilotaje en los bornes 1.0 - 1.1 (sin carga hasta 36 V_{CC})
- Compruebe la conexión del conector del cable plano

EL INTERRUPTOR DE „TEST“ ESTÁ PULSADO, PERO EL CONDENSADO NO SE EVACUA:

LA TUBERÍA DE LA ENTRADA Y/O LA TUBERÍA DE LA SALIDA ESTÁN OBSTRUIDAS

DESGASTE

LA PLATINA DE PILOTAJE ESTÁ DEFECTUOSA

LA VÁLVULA DE PILOTAJE ESTÁ DEFECTUOSA

- Controle la tuberías
- Cambie las piezas de desgaste
- Compruebe si puede oír la válvula actuando (pulse el interruptor „TEST“ varias veces)
- Compruebe la tensión de 24 V_{CC} del circuito de pilotaje en los bornes 1.0 - 1.1 (sin carga hasta 36 V_{CC})

EVACUACIÓN DEL CONDENSADO SOLO SI ESTÁ PULSADO EL INTERRUPTOR DE „TEST“:

LA TUBERÍA DE LA ENTRADA NO TIENE PENDIENTE DESCENDENTE CONSTANTE

HAY DEMASIADA CANTIDAD DE CONDENSADO

EL SENSOR ESTÁ MUY SUCIO

LA RED NO TIENE LA PRESIÓN MÍNIMA

- Instale la tubería con pendiente descendente constante
- Instale una tubería de compensación
- Limpie el tubo del sensor
- Asegure la presión mínima necesaria o instale un Q MAT para baja presión o para vacío

EL APARATO ESTÁ ABIERTO CONSTANTEMENTE:

LOS CONDUCTOS DE PILOTAJE ESTÁN OBSTRUIDOS

DESGASTE

- Limpie todo el módulo de la válvula
- Cambie las piezas de desgaste
- Limpie el tubo sensoria

Recherche de panne

AUCUNE LED N'EST ALLUMÉE:

ORIGINES POSSIBLES:

- DÉFAUT D'ALIMENTATION ÉLECTRIQUE
CARTE D'ALIMENTATION DÉFECTUEUSE
CARTE DE COMMANDE DÉFECTUEUSE
- RELEVER LA TENSION SUR LA PLAQUE
 - VÉRIFIER LA TENSION SUR LA CARTE D'ALIMENTATION, AUX BORNES 0.0 - 0.1 - 0.2.
 - VÉRIFIER LA TENSION DE 24 VDC SUR LA CARTE DE COMMANDE, AUX BORNES 1.0 - 1.1 (SANS CHARGE, JUSQU'À 36 VOLTS CONTINU PEUVENT ÊTRE MESURÉS)
 - VÉRIFIER LIAISON ENFICHABLE/CÂBLE EN NAPPE
-

LA TOUCHE TEST EST ACTIONNÉE, MAIS SANS PURGE DU CONDENSÂT:

- CONDUITES D'ARRIVÉE ET/OU D'ÉVACUATION OBTURÉES OU BOUCHÉES
USURE
CARTE DE COMMANDE DÉFECTUEUSE
VALVE DE SOLÉNOÏDE DÉFECTUEUSE
- CONTRÔLER L'ARRIVÉE ET L'ÉVACUATION
 - REMPLACER LES PIÈCES D'USURE
 - VÉRIFIER SI L'OUVERTURE DE LA SOUPAPE EST PERCEPTIBLE (PRESSER PLUSIEURS FOIS LA TOUCHE TEST)
 - VÉRIFIER LES 24 VDC SUR LA CARTE DE COMMANDE, AUX BORNES 3.0 - 3.1 - 3.2. (SANS CHARGE, JUSQU'À 36 VOLTS CONTINU PEUVENT ÊTRE MESURÉS)
-

PURGE DU CONDENSÂT UNIQUEMENT SI LA TOUCHE TEST EST ACTIONNÉE:

- CONDUITE D'ARRIVÉE AVEC PENTE INSUFFISANTE
TROP DE CONDENSAT PRODUIT
TUBE DE SONDE FORTEMENT ENCRASSÉ
PRESSION MINIMALE NON ATTEINTE
- RÉALISER L'ARRIVÉE AVEC UNE PENTE
 - INSTALLER UNE CONDUITE D'ÉQUILIBRAGE D'AIR
 - NETTOYER LE TUBE DE SONDE
 - ASSURER LA PRESSION MINIMALE OU INSTALLER UN PURGEUR LOW PRESSURE OU À DÉPRESSION
-

L'APPAREIL REFOULE DE L'AIR EN PERMANENCE:

- CONDUITE D'ÉQUILIBRAGE D'AIR BOUCHÉE
USURE (JOINTS, NOYAU DE L'ÉLECTROVANNE, MEMBRANE)
- EFFECTUER UN NETTOYAGE COMPLET DE L'ENSEMBLE ÉLECTROVANNE
 - REMPLACER LES PIÈCES D'USURE
 - NETTOYER LE TUBE SONDE
-

TODOS OS LEDs APAGADOS:

CAUSAS POSSÍVEIS:

ERRO NA ALIMENTAÇÃO DE TENSÃO

FONTE DE ALIMENTAÇÃO DEFEITUOSA

PLACA DE COMANDO DEFEITUOSA

- VER NA PLACA INDICADOR A TENSÃO CORRETA
- VERIFICAR TENSÃO DOS BORNES 0.0 - 0.1 - 0.2 NA PLACA DE ALIMENTAÇÃO A PARTIR DA REDE
- VERIFICAR TENSÃO 24 VDC DOS BORNES 1.0 - 1.1 NA PLACA DE COMANDO (SEM CARGA, PODE SER MEDIDA ATÉ 36 VDC)
- VERIFICAR CONEXÃO DA FICHA/CABO EM FITA

BOTÃO DE TESTE PREMIDO, MAS NÃO HÁ DESCARGA DE CONDENSADO:

TUBO DE AFLUÊNCIA E/OU DESCARGA FECHADO OU ENTUPIDO

DESGASTE

PLACA DE COMANDO DEFEITUOSA

VÁLVULA MAGNÉTICA DEFEITUOSA

- CONTROLAR TUBOS DE AFLUÊNCIA E DESCARGA
- SUBSTITUIR PEÇAS DE DESGASTE
- VERIFICAR SE A VÁLVULA SE ABRE ADIAVELMENTE (PREMIR REPETIDAMENTE O BOTÃO DE TESTE)
- VERIFICAR TENSÃO 24 VDC DOS BORNES 3.0 - 3.1 -3.2 NA PLACA DE COMANDO (SEM CARGA, PODE SER MEDIDA ATÉ 36 VDC)

DESCARGA DE CONDENSADO SÓ COM O BOTÃO DE TESTE PREMIDO:

TUBO ADUTOR SEM DECLIVE SUFICIENTE

QUANTIDADE EXCESSIVA DE CONDENSADO

TUBO-SENSOR EXTREMAMENTE SUJO

PRESSÃO INFERIOR À PRESSÃO MÍNIMA NECESSÁRIA

- ASSENTAR TUBO COM DECLIVE ADEQUADO
- INSTALAR UM DESVIO PARA DESVIO DO AR
- LIMPAR O TUBO-SENSOR
- ASSEGURAR PRESSÃO MÍNIMA OU INSTALAR UM ESCOADOURO DE BAIXA PRESSÃO OU DE VÁCUO.

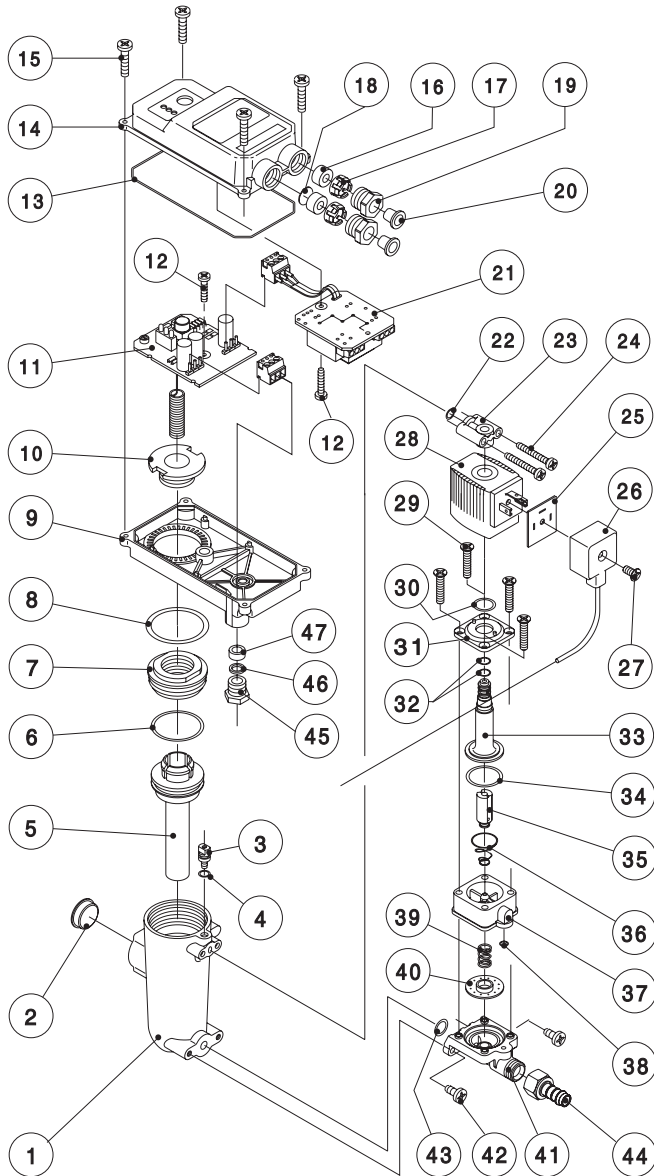
O PURGA DOR PERDE AR CONTINUAMENTE :

TUBO DE CONTROLO DE AR ENTUPIDO

DESGASTE

- LIMPAR A UNIDADE COMPLETA DA VÁLVULA
- SUBSTITUIR PEÇAS DE DESGASTE
- LIMPAR SENSOR

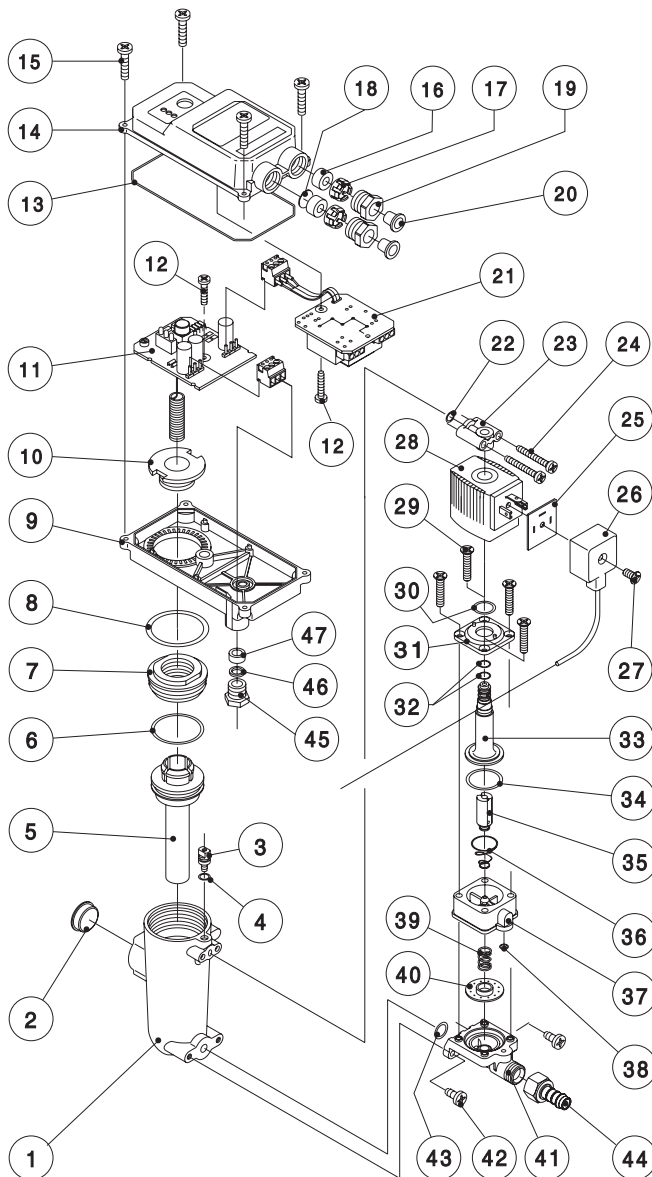
Components



- 1 HOUSING
- 2 DUST CAP R 1/2
- 3 EARTHING SCREW
- 4 O-RING 4 x 1,5
- 5 SENSOR TUBE
- 6 O-RING 31,42 x 2,62
- 7 FIXING SCREW
- 8 O-RING 34,59 x 2,62
- 9 BOTTOM OF COVER
- 10 COVER MOUNTING ELEMENT
- 11 CONTROL PCB
- 12 PAN-HEAD SCREW M3 x 6
- 13 CORD PACKING 315 x 2
- 14 TOP COVER
- 15 PAN-HEAD SCREW M3 x 10
- 16 SEALING RING FOR PG9
- 17 CLAMPING FIXTURE FOR PG9
- 18 DUST PROTECTION DISK PG9
- 19 CLAMPING BOLT FOR PG9
- 20 DUST CAP
- 21 POWER SUPPLY BOARD
- 22 O-RING 5,5 x 1,5
- 23 CONTROL-AIR COVER
- 24 PAN-HEAD SCREW M4 x 30
- 25 PLUG SEALING PANEL
- 26 VALVE CONNECTOR
- 27 FIXING SCREW
- 28 SOLENOID
- 29 COUNTERSUNK SCREW M4x25
- 30 O-RING 11,1 x 1,78
- 31 FLANGE
- 32 O-RING 6,07 x 1,3
- 33 CORE GUIDE PIPE
- 34 OVAL RING 21,8x1,5x2,5
- 35 VALVE CORE
- 36 CONICAL SPRING
- 37 DIAPHRAGM CAP
- 38 O-RING 5,5 x 1,5
- 39 PRESSURE SPRING FOR DIAPHRAGM
- 40 DIAPHRAGM
- 41 DIAPHRAGM SEAT
- 42 PAN-HEAD SCREW M4 x 12
- 43 O-RING 9,25 x 1,78
- 44 HOSE CONNECTOR
- 45 CLAMPING BOLT FOR PG7
- 46 CLAMPING RING FOR PG7
- 47 SEALING RING FOR PG7

Q MAT HP 1000 VARIATIONS

- 41 DIAPHRAGM SEAT
- 42 PAN-HEAD SCREW M5 x 12
- 43 O-RING 5 x 1,5
- 44 HOSE CONNECTOR Ø13

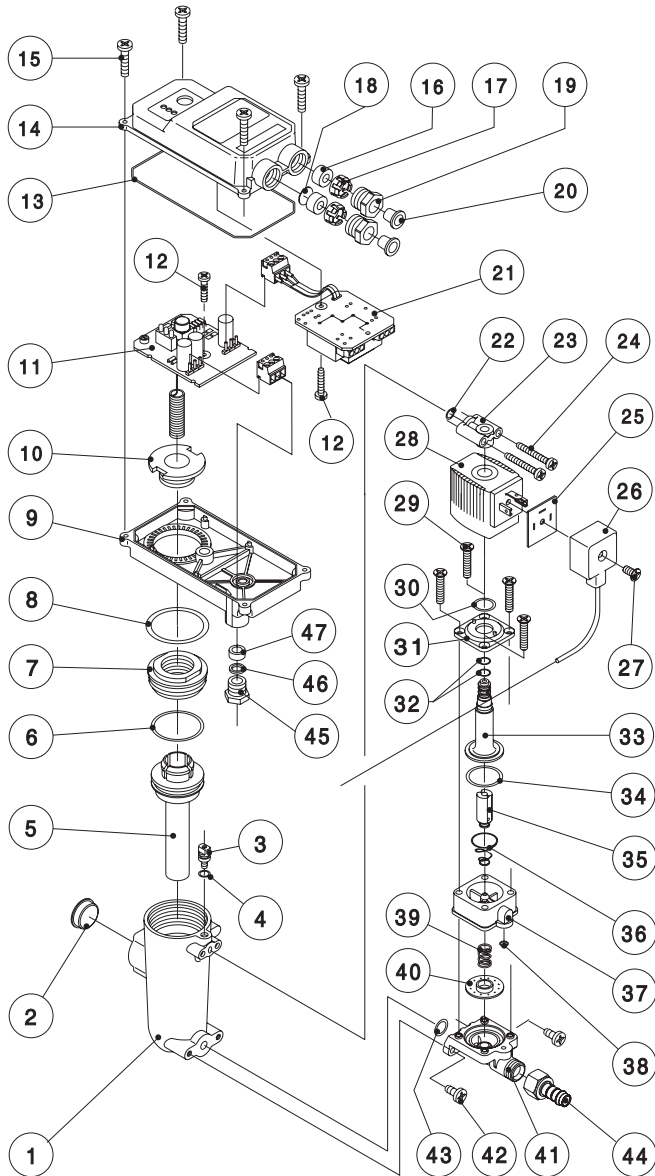


- 1 CARCASA
- 2 TAPÓN DE CIERRE
- 3 TORNILLO MASA
- 4 JUNTA TÓRICA 4 x 1,5
- 5 TUBO SENSOR
- 6 JUNTA TÓRICA 31,42 x 2,62
- 7 TORNILLO DE FIJACIÓN
- 8 JUNTA TÓRICA 34,59 x 2,62
- 9 TAPA INFERIOR
- 10 FIJACIÓN TAPA INFERIOR
- 11 PLATINA DE PILOTAJE
- 12 TORNILLO M3 x 6
- 13 JUNTA TÓRICA 2 x 315
- 14 TAPA SUPERIOR
- 15 TORNILLO M3 x 10
- 16 JUNTA PARA PG9
- 17 BRIDA PARA PG9
- 18 DISCO PROTECCIÓN POLVO
- 19 TORNILLO PARA PG9
- 20 TAPÓN DE CIERRE
- 21 PLATINA FUENTE DE ALIMENTACIÓN
- 22 JUNTA TÓRICA 5,5 x 1,5
- 23 TAPA DEL AIRE DE PILOTAJE
- 24 TORNILLO M4 x 30
- 25 JUNTA PARA CONECTAR
- 26 CONECTAR VÁLVULA
- 27 TORNILLO DE FIJACIÓN
- 28 BOBINA
- 29 TORNILLO M4 x 25
- 30 JUNTA TÓRICA 11,1 x 1,78
- 31 BRIDA
- 32 JUNTA TÓRICA 6,07 x 1,3
- 33 TUBO GUIA NÚCLEO
- 34 JUNTA OVALADA 21,8x1,5x2,5
- 35 NÚCLEO DE LA VÁLVULA
- 36 MUELLE PARA EL NÚCLEO
- 37 TAPA MEMBRANA
- 38 JUNTA TÓRICA 5,5 x 1,5
- 39 MUELLE PARA LA MEMBRANA
- 40 MEMBRANA
- 41 ASIENTO MEMBRANA
- 42 TORNILLO M4 x 12
- 43 JUNTA TÓRICA 9,25 x 1,78
- 44 TUBO CONEXIÓN
- 45 TORNILLO PARA PG7
- 46 BRIDA PARA PG7
- 47 JUNTA PARA PG7

Q MAT HP 1000 VARIACIONES

- 41 ASIENTO MEMBRANA
- 42 TORNILLO M5 x 12
- 43 JUNTA TÓRICA 5 x 1,5
- 44 TUBO CONEXIÓN Ø13

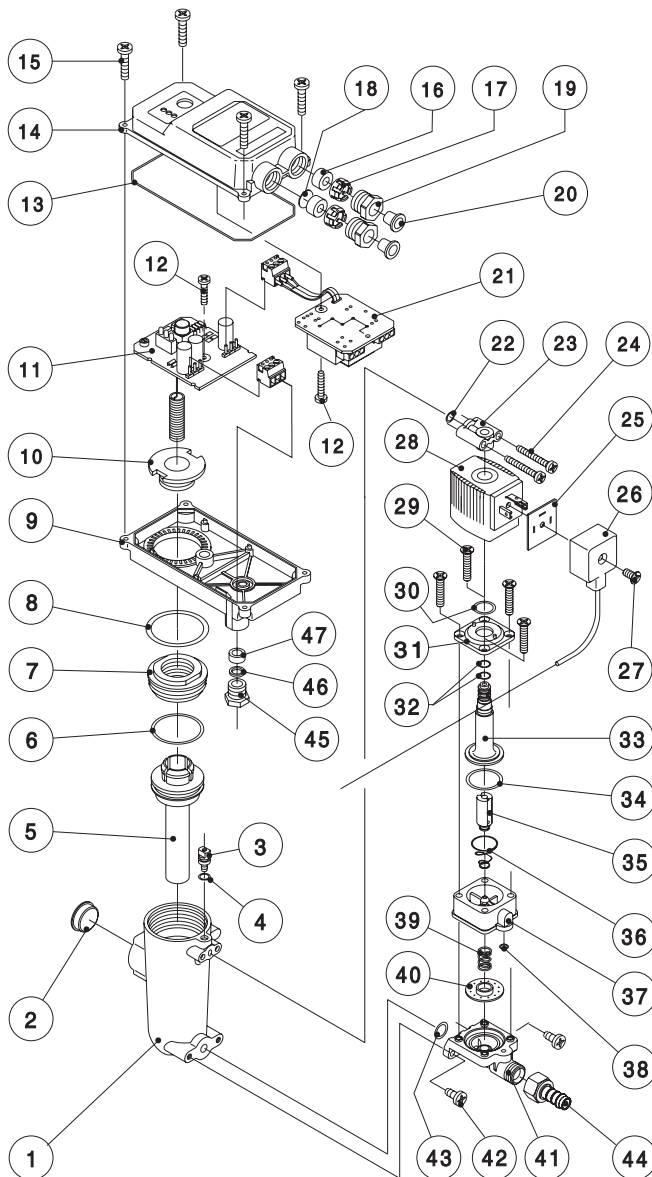
Nomenclature des Pièces



- 1 BOÎTIER
- 2 OBTURATEUR R ½
- 3 VIS DE MASSE
- 4 JOINT TORIQUE 4 x 1,5
- 5 TUBE DE SONDÉ
- 6 JOINT TORIQUE 31,42x2,62
- 7 VIS DE FIXATION
- 8 JOINT TORIQUE 34,59x2,62
- 9 PARTIE INF. DU BOÎTIER ÉLEC.
- 10 FIXATION DU BOÎTIER ÉLEC.
- 11 CARTE DE COMMANDE
- 12 VIS À TÊTE CYL. M3 x 6
- 13 JOINT BOÎTIER ÉLEC. 315x2
- 14 PARTIE SUP. DU BOÎTIER ÉLEC.
- 15 VIS À TÊTE CYL. M3x10
- 16 BAGUE D'ÉTANCHÉITÉ
- 17 CAGE SERRE-CÂBLE
- 18 JOINT ANTIPOUSSIÈRE
- 19 VIS DE PRESSION
- 20 OBTURATEUR
- 21 CARTE D'ALIMENTATION
- 22 JOINT TORIQUE 5,5 x 1,5
- 23 COUVERCLE AIR DE COMM.
- 24 VIS À TÊTE CYL. M4x30
- 25 JOINT DU CONNECTEUR
- 26 CONNECTEUR SOUPE
- 27 VIS DE FIXATION
- 28 BOBINE MAGNÉTIQUE
- 29 VIS À TÊTE FRAISÉE
- 30 JOINT TORIQUE 11,1 x 1,78
- 31 BRIDE
- 32 JOINT TORIQUE 6,07 x 1,3
- 33 TUBE GUIDE NOYAU
- 34 JOINT OVALE
- 35 NOYAU DE VANNE
- 36 RESSORT CONIQUE
- 37 COUVERCLE DE MEMBRANE
- 38 JOINT TORIQUE 5,5 x 1,5
- 39 RESSORT DE MEMBRANE
- 40 MEMBRANE
- 41 SIÈGE DE LA MEMBRANE
- 42 VIS À TÊTE CYL. M4x12
- 43 JOINT TORIQUE 9,25 x 1,78
- 44 DOUILLE POUR FLEXIBLE
- 45 VIS DE PRESSION
- 46 BAGUE DE COMPRESSION
- 47 BAGUE D'ÉTANCHÉITÉ

Q MAT HP 1000

- 41 SIÈGE DE LA MEMBRANE
- 42 VIS À TÊTE CYL. M5 x 12
- 43 JOINT TORIQUE 5 x 1,5
- 44 DOUILLE POUR FLEXIBLE Ø13



- 1 CAIXA
- 2 BUJÃO R 1/2
- 3 PARAFUSO DE LIGAÇÃO À TERRA
- 4 ANEL EM „o” 4 x 1,5
- 5 TUBO-SENSOR
- 6 ANEL EM „o” 31,42x2,62
- 7 PARAFUSO DE FIXAÇÃO
- 8 ANEL EM „o” 34,59x2,62
- 9 PARTE DE BAIXO DA COBERTURA
- 10 ELEMENTO DE FIXAÇÃO DA COBERTURA
- 11 PLACA DE COMANDO
- 12 PARAFUSO DE CABEÇA LENTICULAR M3 x 6
- 13 EMPANQUE DE CORDÃO 2x315
- 14 PARTE DE CIMA DA COBERTURA
- 15 PARAFUSO DE CABEÇA LENTICULAR M3 x 10
- 16 ANEL DE VEDAÇÃO
- 17 CAPA DE APERTO PARA PG9
- 18 DISCO PROTECTOR CONTRA PÓ
- 19 PARAFUSO DE PRESSÃO
- 20 BUJÃO
- 21 PLACA DE ALIMENTAÇÃO A PARTIR DA REDE
- 22 ANEL EM „o” 5,5 x 1,5
- 23 TAMPA DO AR DE CONTROLO
- 24 PARAFUSO DE CABEÇA LENTICULAR M4 x 30
- 25 EMPANQUE DE FICHA
- 26 LIGADOR DE VÁLVULA
- 27 PARAFUSO DE FIXAÇÃO
- 28 BOBINA INDUCTORA
- 29 PARAFUSO DE CABEÇA ESCAREADA M4 x 25
- 30 ANEL EM „o” 11,1 x 1,78
- 31 FLANGE
- 32 ANEL EM „o” 6,07 x 1,3
- 33 TUBO DE GUIA DO NÚCLEO
- 34 ANEL OVAL 21,8x1,5x2,5
- 35 NÚCLEO DE VÁLVULA
- 36 MOLA CÔNICA EM FIO METÁLICO
- 37 TAMPA DO DIAFRAGMA
- 38 5,5 x 1,5
- 39 MOLA DE PRESSÃO PARA DIAFRAGMA
- 40 DIAFRAGMA
- 41 ASSENTO DO DIAFRAGMA
- 42 PARAFUSO DE CABEÇA LENTICULAR M4 x 12
- 43 ANEL EM „o” 9,25 x 1,78
- 44 CONECTOR DE TUBO DE BORRACHA Ø10
- 45 PARAFUSO DE PRESSÃO
- 46 ANEL DE APERTO PARA PG7
- 47 ANEL DE VEDAÇÃO

Q MAT HP 1000 VARIAÇÕES

- 41 ASSENTO DO DIAFRAGMA
- 42 PARAFUSO DE CABEÇA LENTICULAR M5 x 12
- 43 ANEL EM „o” 5 x 1,5
- 44 TUBO DE BORRACHE Ø13

Replacement Parts

Q MAT 03 REPLACEMENT PARTS KITS		
PART NUMBER	CONTENTS	DESCRIPTION
2000049	22, 34, 35, 36, 38, 39, 40, 43	WEAR PARTS KIT
2000052	22, 23, 24, 29, 37, 38, 41, 42, 43	VALVE MOUNTING KIT
2000055	22, 23, 24, 28-43	SOLENOID VALVE KIT
2000058	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	SEAL KIT
2000232	1, 3, 4, 6, 10, 22, 43	HOUSING KIT

Q MAT HP 1000 REPLACEMENT PARTS KITS		
PART NUMBER	CONTENTS	DESCRIPTION
2000748	22, 34, 35, 36, 38, 39, 40, 43	WEAR PARTS KIT
2000054	22, 23, 24, 29, 37, 38, 41, 42, 43, 44, 48	VALVE MOUNTING KIT
2000057	22, 23, 24, 28-43, 48	SOLENOID VALVE KIT
2000749	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	SEAL KIT
2000236	1, 3, 4, 6, 10, 22, 43	HOUSING KIT

Q MAT 03/Q MAT HP 1000 MISCELLANEOUS REPLACEMENT PARTS		
PART NUMBER	CONTENTS	DESCRIPTION
2000062	11, 12	PCB SENSOR
2000064	21, 12	PCB POWER SUPPLY
2000066	13-20	TOP COVER KIT

Piezas De Recambio

Q MAT 03 KITS DE LAS PIEZAS DE RECAMBIO		
REFERENCIA	CONTENIDO	DESCRIPCIÓN
2000049	22, 34, 35, 36, 38, 39, 40, 43	KIT DE DESGASTE
2000052	22, 23, 24, 29, 37, 38, 41, 42, 43	PIEZAS PARA LA VÁLVULA
2000055	22, 23, 24, 28-43	VÁLVULA COMPLETA
2000058	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	KIT DE JUNTAS
2000232	1, 3, 4, 6, 10, 22, 43	CARCASA COMPLETA

Q MAT HP 1000 KITS DE LAS PIEZAS DE RECAMBIO		
REFERENCIA	CONTENIDO	DESCRIPCIÓN
2000748	22, 34, 35, 36, 38, 39, 40, 43	KIT DE DESGASTE
2000054	22, 23, 24, 29, 37, 38, 41, 42, 43, 44, 48	PIEZAS PARA LA VÁLVULA
2000057	22, 23, 24, 28-43, 48	VÁLVULA COMPLETA
2000749	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	KIT DE JUNTAS
2000236	1, 3, 4, 6, 10, 22, 43	CARCASA COMPLETA

Q MAT 03/Q MAT HP 1000 PIEZAS DE RECAMBIO MISCELÁNEAS		
REFERENCIA	CONTENIDO	DESCRIPCIÓN
2000062	11, 12	PLATINA DE PILOTAJE
2000064	21, 12	FUENTE DE ALIMENTACIÓN
2000066	13-20	TAPA SUPERIOR COMPLETA

Pièces De Rechange

Q MAT 03 KITS DE PIÈCES DE RECHANGE		
NUMÉRO DE LA PIÈCE	TABLE DES MATIÈRES	DESCRIPTION DE PIÈCES
2000049	22, 34, 35, 36, 38, 39, 40, 43	L'USAGE PARTIE LE KIT
2000052	22, 23, 24, 29, 37, 38, 41, 42, 43	KIT DE SUPPORT DE VALVE
2000055	22, 23, 24, 28-43	KIT DE VALVE DE SOLÉNOÏDE
2000058	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	KIT DE JOINT
2000232	1, 3, 4, 6, 10, 22, 43	KIT DE LOGEMENT

Q MAT HP 1000 REPLACEMENT PARTS KITS		
NUMÉRO DE LA PIÈCE	TABLE DES MATIÈRES	DESCRIPTION DE PIÈCES
2000748	22, 34, 35, 36, 38, 39, 40, 43	L'USAGE PARTIE LE KIT
2000054	22, 23, 24, 29, 37, 38, 41, 42, 43, 44, 48	KIT DE SUPPORT DE VALVE
2000057	22, 23, 24, 28-43, 48	KIT DE VALVE DE SOLÉNOÏDE
2000749	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	KIT DE JOINT
2000236	1, 3, 4, 6, 10, 22, 43	KIT DE LOGEMENT

Q MAT 03/Q MAT HP 1000 MISCELLANEOUS REPLACEMENT PARTS		
NUMÉRO DE LA PIÈCE	TABLE DES MATIÈRES	DESCRIPTION DE PIÈCES
2000062	11, 12	SONDE DE CARTE
2000064	21, 12	ALIMENTATION D'ÉNERGIE DE CARTE
2000066	13-20	KIT DE COUVERTURE SUPÉRIEURE

Peças De Recolocaçã

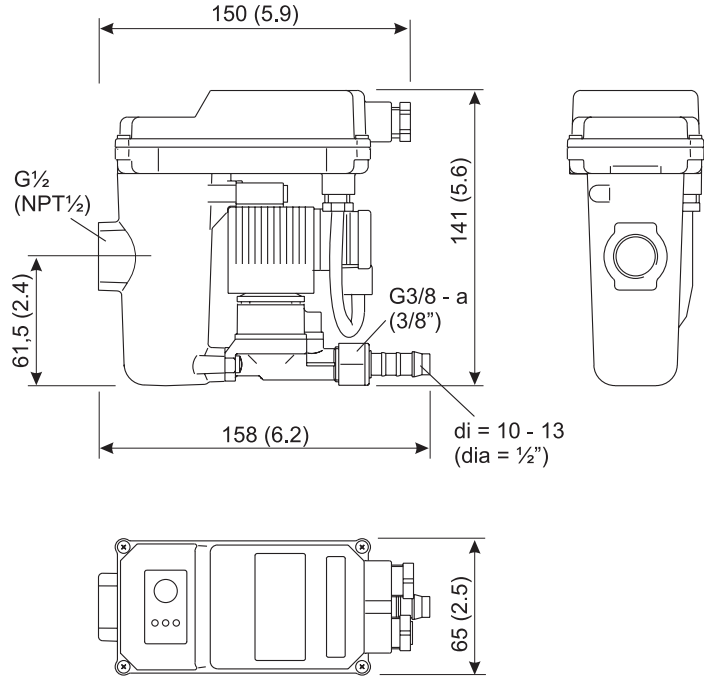
Q MAT 03 JOGOS DAS PEÇAS DE RECOLOCAÇÃO		
NÚMERO DA PEÇA	ÍNDICES	DESCRIÇÃO
2000049	22, 34, 35, 36, 38, 39, 40, 43	O DESGASTE PARTE O JOGO
2000052	22, 23, 24, 29, 37, 38, 41, 42, 43	JOGO DA MONTAGEM DA VÁLVULA
2000055	22, 23, 24, 28-43	JOGO DA VÁLVULA DE SOLENÓIDE
2000058	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	JOGO DO SELO
2000232	1, 3, 4, 6, 10, 22, 43	JOGO DA CARÇA

Q MAT HP 1000 REPLACEMENT PARTS KITS		
NÚMERO DA PEÇA	ÍNDICES	DESCRIÇÃO
2000748	22, 34, 35, 36, 38, 39, 40, 43	O DESGASTE PARTE O JOGO
2000054	22, 23, 24, 29, 37, 38, 41, 42, 43, 44, 48	JOGO DA MONTAGEM DA VÁLVULA
2000057	22, 23, 24, 28-43, 48	JOGO DA VÁLVULA DE SOLENÓIDE
2000749	4, 6, 8, 13, 22, 30, 32, 34, 38, 43	JOGO DO SELO
2000236	1, 3, 4, 6, 10, 22, 43	JOGO DA CARÇA

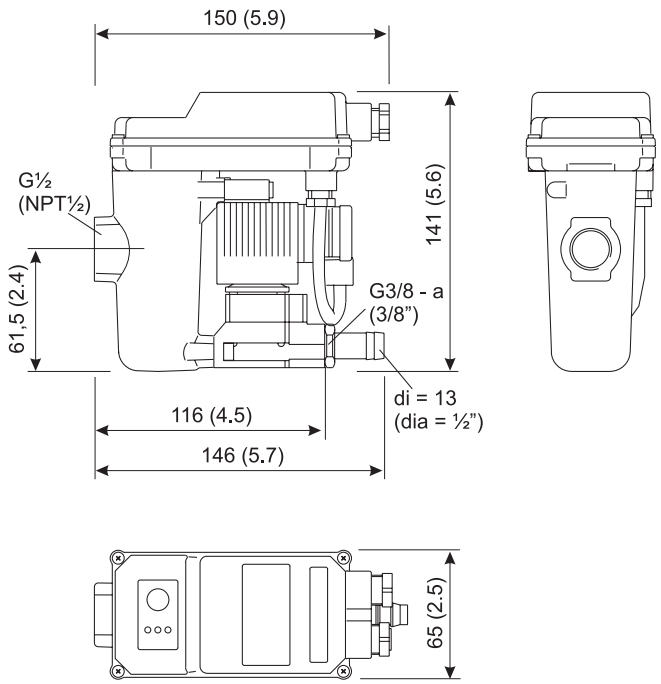
Q MAT 03/Q MAT HP 1000 MISCELLANEOUS REPLACEMENT PARTS		
NÚMERO DA PEÇA	ÍNDICES	DESCRIÇÃO
2000062	11, 12	PLACA „COMANDO“
2000064	21, 12	PLACA „ALIMENTAÇÃO A PARTIR DA REDE“
2000066	13-20	PORTE DE CIMA DA COBERTURA, COMPLET

Dimensions • Dimensiones • Dimensions • Dimensões

Q MAT 03



Q MAT HP 1000



Accessories • Accesorios • Accessoires • Acessórios

QBMHTR125W1000	THERMOSTATICALLY CONTROLLED HEATER
	CALEFACCIÓN REGULADA POR TERMOSTATO
	CHAUFFAGE À RÉGULATION THERMOSTATIQUE
	AQUECIMENTO CONTROLADO TERMOSTATICAMENTE

Data/Notes • Características/Indicaciones Caracteristiques/Avis • Dados/Características

TECHNICAL DATA	Q MAT 03	Q MAT HP 1000
MIN/MAX TEMPERATURE	+34/+140°F	
CONDENSATE DISCHARGE	1/2" NPT	
CONDENSATE FEED (HOSE)	Ø3/8"	
PEAK COMPRESSOR PERFORMANCE	270 SCFM	
PEAK REFRIGERATION DRYER PERFORMANCE (ONLY WITH PRE-SEPARATION)	540 SCFM	
PEAK FILTER PERFORMANCE (BEHIND DRYER)	2700 SCFM	
OPERATING PRESSURE, MIN/MAX	12 PSIG/230 PSIG	12 PSIG/1000 PSIG
WEIGHT (EMPTY)	1.8 LBS	2.0 LBS
CONDENSATE	OIL-CONTAMINATED + OIL-FREE	
HOUSING	ALUMINUM	ALUMINUM, HARD-COATED

DATOS TÉCNICOS	Q MAT 03	Q MAT HP 1000
TEMPERATURA MÍN./MÁX.	+34/+140°F	
ENTRADA CONDENSADO	1/2" NPT	
SALIDA DE CONDENSADO (MANGUERA)	Ø3/8"	
CAUDAL DEL COMPRESOR MÁX.	270 SCFM	
RENDIMIENTO MÁX. DEL SECADOR AL FRÍO (SOLAMENTE CON SEPARACIÓN PREVIA)	540 SCFM	
RENDIMIENTO MÁX. DEL FILTRO (DETRÁS DE SECADOR)	2700 SCFM	
PRESIÓN DE SERVICIO MÍN./MÁX.	12 PSIG/230 PSIG	12 PSIG/1000 PSIG
PESO (VACÍO)	1.8 LBS	2.0 LBS
CONDENSADO	OLEOSO + EXENTO DE ACEITE	
CARCASA	ALUMINIO	ALUMINIO ENDURECIDO

DONNÉES TECHNIQUES	Q MAT 03	Q MAT HP 1000
TEMPÉRATURE MIN/MAX	+34/+140°F	
ENTRÉE DU CONDENSÂT	1/2" NPT	
ENTRÉE DU CONDENSÂT	Ø3/8"	
CAPACITÉ MAXIMALE DU COMPRESSEUR	270 SCFM	
CAPACITÉ MAX. DU SÈCHEUR FRIGO (UNIQUEMENT AVEC PRÉ-SEPARATION)	540 SCFM	
CAPACITÉ MAXIMALE DU FILTRE (EN AVAL DU SÈCHEUR)	2700 SCFM	
PRESSION DE SERVICE MIN/MAX	12 PSIG/230 PSIG	12 PSIG/1000 PSIG
POIDS (À VIDE)	1.8 LBS	2.0 LBS
CONDENSÂT	HUILEUX + NON HUILEUX	
BOÎTIER	ALUMINIUM	ALUMINIUM, DUR-ENDUIT

DADOS TÉCNICOS	Q MAT 03	Q MAT HP 1000
TEMPERATURA MÍN./MÁX.	+34/+140°F	
ENTRADA DE CONDENSADO	1/2" NPT	
SAÍDA DE CONDENSADO (TUBO FLEXÍVEL)	Ø3/8"	
CAPACIDADE MÁXIMA DO COMPRESSOR	270 SCFM	
CAPACIDADE MÁXIMA DO SECADOR FRIGORÍFICO (SÓ COM SEPARAÇÃO PRELIMINAR)	540 SCFM	
CAPACIDADE MÁXIMA DO FILTRO (POR TRÁS DO SECADOR)	2700 SCFM	
PRESSÃO DE SERVIÇO MÍN./MÁX.	12 PSIG/230 PSIG	12 PSIG/1000 PSIG
PESO (VAZIO)	1.8 LBS	2.0 LBS
CONDENSADO	COM ÓLEO + ISENTO DE ÓLEO	
CARCASA	ALUMÍNIO	ALUMÍNIO ENDURECIDO

STANDARD TERMS AND CONDITIONS

QUINCY COMPRESSOR AND ORTMAN FLUID POWER DIVISIONS

LEGAL EFFECT: Except as expressly otherwise agreed to in writing by an authorized representative of Seller, the following terms and conditions shall apply to and form a part of this order and any additional and/or different terms of Buyer's purchase order or other form of acceptance are rejected in advance and shall not become a part of this order.

The rights of Buyer hereunder shall be neither assignable nor transferable except with the written consent of Seller.

This order may not be canceled or altered except with the written consent of Seller and upon terms which will indemnify Seller against all loss occasioned thereby. All additional costs incurred by Seller due to changes in design or specifications, modification of this order or revision of product must be paid for by Buyer.

In addition to the rights and remedies conferred upon Seller by this order, Seller shall have all rights and remedies conferred at law and in equity and shall not be required to proceed with the performance of this order if Buyer is in default in the performance of such order or of any other contract or order with seller.

TERMS OF PAYMENT: Unless otherwise specified in the order acknowledgment, the terms of payment shall be net cash within thirty (30) days after shipment. These terms shall apply to partial as well as complete shipments. If any proceeding be initiated by or against Buyer under any bankruptcy or insolvency law, or in the judgment of Seller the financial condition of Buyer, at the time the equipment is ready for shipment, does not justify the terms of payment specified, Seller reserves the right to require full payment in cash prior to making shipment. If such payment is not received within fifteen (15) days after notification of readiness for shipment, Seller may cancel the order as to any unshipped item and require payment of its reasonable cancellation charges.

If Buyer delays shipment, payments based on date of shipment shall become due as of the date when ready for shipment. If Buyer delays completion of manufacture, Seller may elect to require payment according to percentage of completion. Equipment held for Buyer shall be at Buyer's risk and storage charges may be applied at the discretion of Seller.

Accounts past due shall bear interest at the highest rate lawful to contract for but if there is no limit set by law, such interest shall be eighteen percent (18%). Buyer shall pay all cost and expenses, including reasonable attorney's fees, incurred in collecting the same, and no claim, except claims within Seller's warranty of material or workmanship, as stated below, will be recognized unless delivered in writing to Seller within thirty (30) days after date of shipment.

TAXES: All prices exclude present and future sales, use, occupation, license, excise, and other taxes in respect of manufacture, sales or delivery, all of which shall be paid by Buyer unless included in the purchase price at the proper rate or a proper exemption certificate is furnished.

ACCEPTANCE: All offers to purchase, quotations and contracts of sales are subject to final acceptance by an authorized representative at Seller's plant.

DELIVERY: Except as otherwise specified in this quotation, delivery will be F. O. B. point of shipment. In the absence of exact shipping instruction, Seller will use its discretion regarding best means of insured shipment. No liability will be accepted by Seller for so doing. All transportation charges are at Buyer's expense. Time of delivery is an estimate only and is based upon the receipt of all information and necessary approvals. The shipping schedule shall not be construed to limit seller in making commitments for materials or in fabricating articles under this order in accordance with Seller's normal and reasonable production schedules.

Seller shall in no event be liable for delays caused by fires, acts of God, strikes, labor difficulties, acts of governmental or military authorities, delays in transportation or procuring materials, or causes of any kind beyond Seller's control. No provision for liquidated damages for any cause shall apply under this order. Buyer shall accept delivery within thirty (30) days after receipt of notification of readiness for shipment. Claims for shortages will be deemed to have been waived if not made in writing within ten (10) days after the receipt of the material in respect of which any such shortage is claimed. Seller is not responsible for loss or damage in transit after having received "In Good Order" receipt from the carrier. All claims for loss or damage in transit should be made to the carrier.

STANDARD TERMS AND CONDITIONS

QUINCY COMPRESSOR AND ORTMAN FLUID POWER DIVISIONS

TITLE & LIEN RIGHTS: The equipment shall remain personal property, regardless of how affixed to any realty or structure. Until the price (including any notes given therefore) of the equipment has been fully paid in cash, Seller shall, in the event of Buyer's default, have the right to repossess such equipment.

PATENT INFRINGEMENT: If properly notified and given an opportunity to do so with friendly assistance, Seller will defend Buyer and the ultimate user of the equipment from any actual or alleged infringement of any published United States patent by the equipment or any part thereof furnished pursuant hereto (other than parts of special design, construction, or manufacture specified by and originating with Buyer), and will pay all damages and costs awarded by competent court in any suit thus defended or of which it may have had notice and opportunity to defend as aforesaid.

STANDARD WARRANTY: Seller warrants that products of its own manufacture will be free from defects in workmanship and materials under normal use and service for the period specified in the product instruction manual. Warranty for service parts will be ninety (90) days from date of factory shipment. Electric Motors, gasoline and diesel engines, electrical apparatus and all other accessories, components and parts not manufactured by Seller are warranted only to the extent of the original manufacturer's warranty.

Notice of the alleged defect must be given to the Seller, in writing with all identifying details including serial number, type of equipment and date of purchase within thirty (30) days of the discovery of the same during the warranty period.

Seller's sole obligation on this warranty shall be, at its option, to repair or replace or refund the purchase price of any product or part thereof which proves to be defective. If requested by Seller, such product or part thereof must be promptly returned to seller, freight prepaid, for inspection.

Seller warrants repaired or replaced parts of its own manufacture against defects in materials and workmanship under normal use and service for ninety (90) days or for the remainder of the warranty on the product being repaired.

This warranty shall not apply and Seller shall not be responsible or liable for:

- (a) Consequential, collateral or special losses or damages;
- (b) Equipment conditions caused by fair wear and tear, abnormal conditions of use, accident, neglect or misuse of equipment, improper storage or damage resulting during shipping;
- (c) Deviation from operating instructions, specifications or other special terms of sale;
- (d) Labor charges, loss or damage resulting from improper operation, maintenance or repairs made by person(s) other than Seller or Seller's authorized service station.

In no event shall Seller be liable for any claims whether arising from breach of contract or warranty or claims of negligence or negligent manufacture in excess of the purchase price.

THIS WARRANTY IS THE SOLE WARRANTY OF SELLERS AND ANY OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED IN LAW OR IMPLIED IN FACT, INCLUDING ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR USE ARE HEREBY SPECIFICALLY EXCLUDED.

LIABILITY LIMITATIONS: Under no circumstances shall the Seller have any liability for liquidated damages or for collateral, consequential or special damages or for loss of profits, or for actual losses or for loss of production or progress of construction, whether resulting from delays in delivery or performance, breach of warranty, negligent manufacture or otherwise.

ENVIRONMENTAL AND OSHA REQUIREMENTS: At the time of shipment of the equipment from the factory, Quincy Compressor / Ortman Fluid Power will comply with the various Federal, State and local laws and regulations concerning occupational health and safety and pollution. However, in the installation and operation of the equipment and other matters over which the seller has no control, the Seller assumes no responsibility for compliance with those laws and regulations, whether by the way of indemnity, warranty or otherwise.



Quincy Compressor Products: 217.222.7700
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Website: www.quincycompressor.com



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