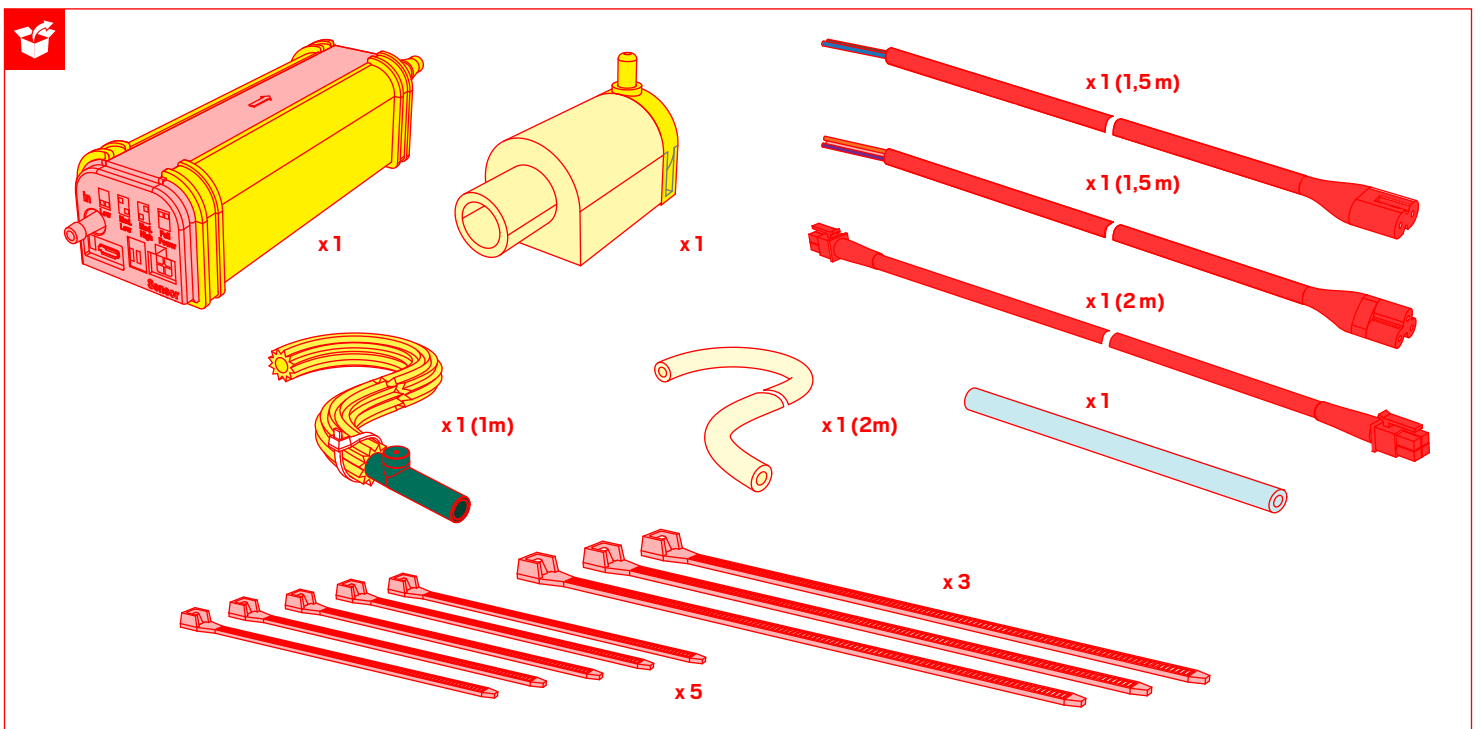
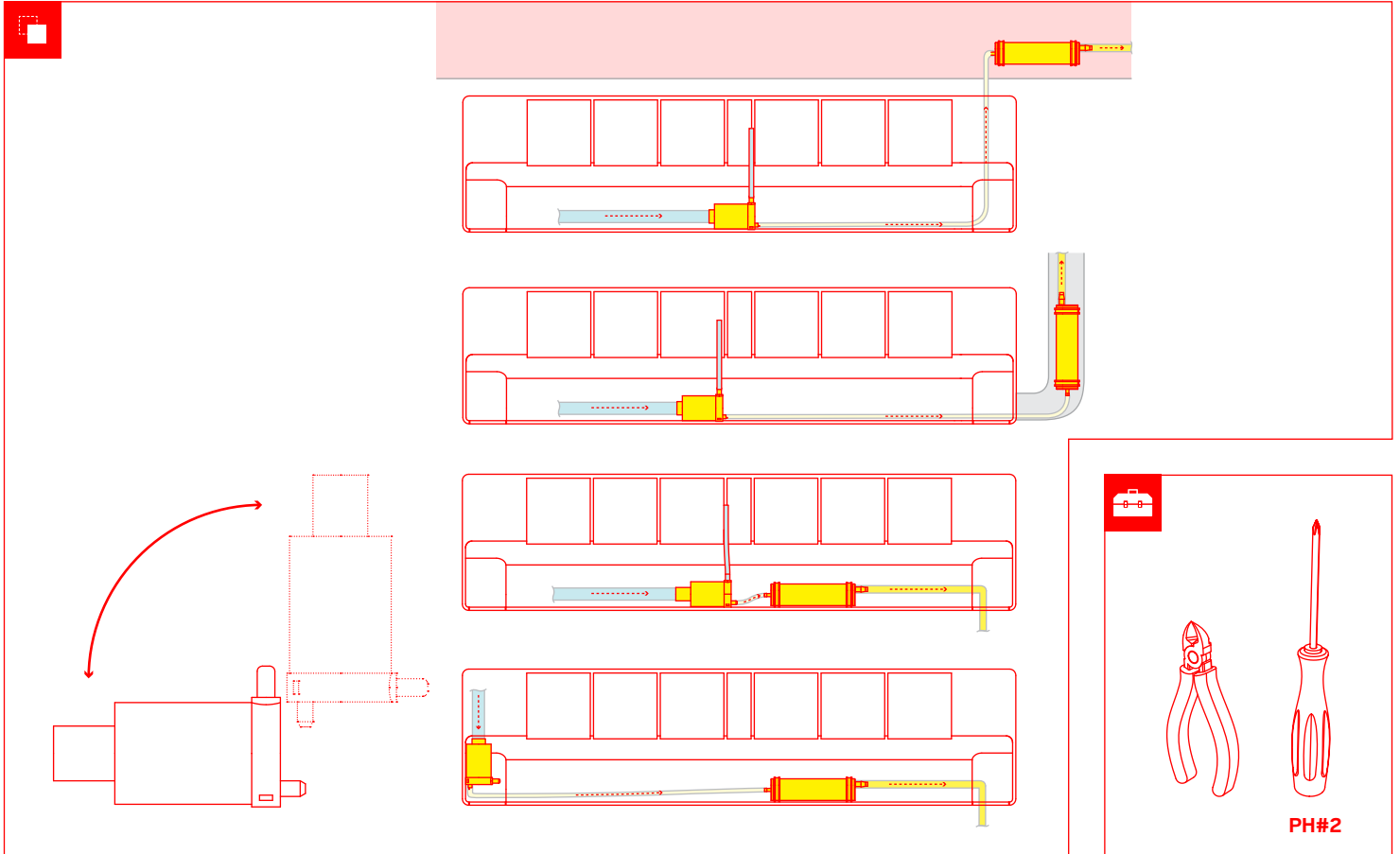
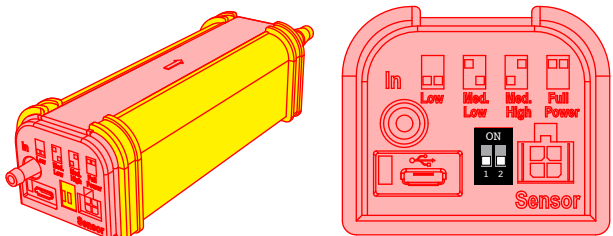



Universal Condensate Pump

Combi




1







Low
up to 18K Btu/h
(5.3kW)



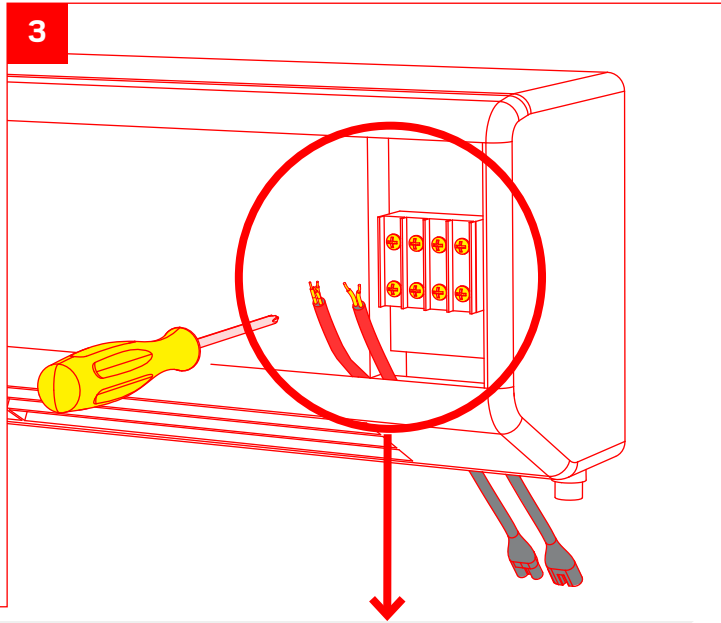
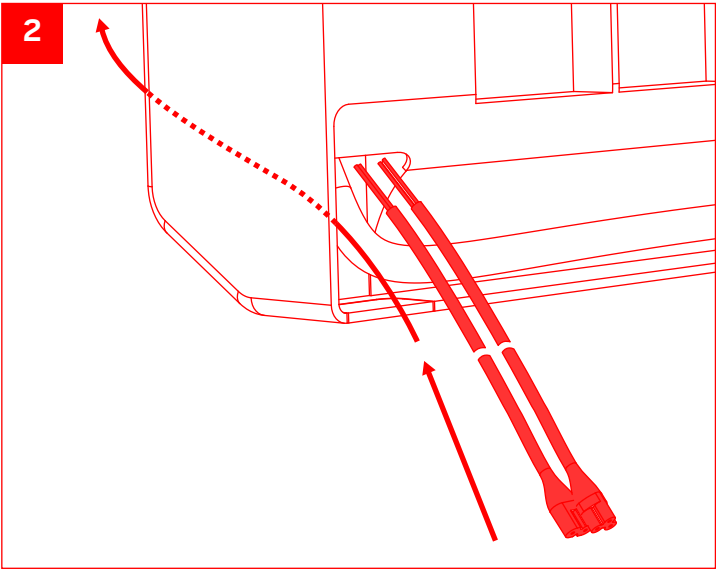
Medium Low
up to 42K Btu/h
(12kW)



Medium High
up to 72K Btu/h
(21.1kW)

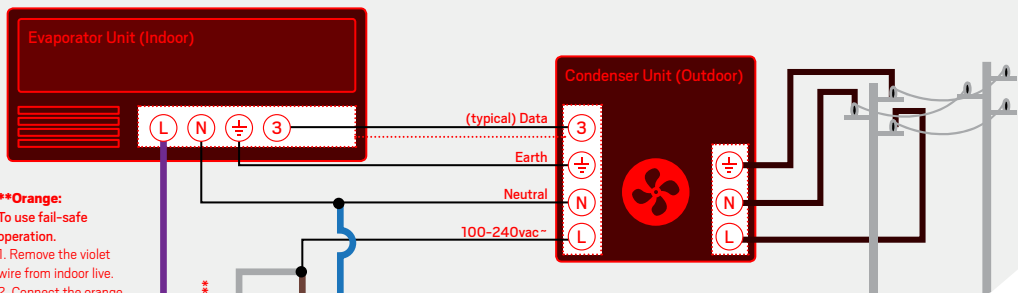


Full Power
up to 120K Btu/h
(35kW)



When Indoor Evaporator Unit is powered from the Outdoor Condenser Unit.

Below examples are for reference only.



****Orange:**
To use fail-safe operation.
1. Remove the violet wire from indoor live.
2. Connect the orange wire to indoor live.
3. Change alarm relay to fail-safe operation.

Alarm Relay Operation Table

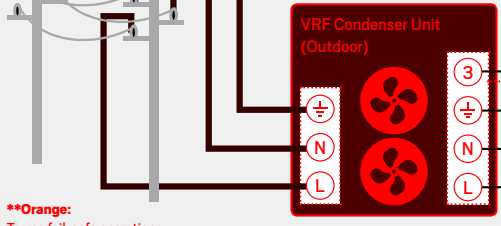
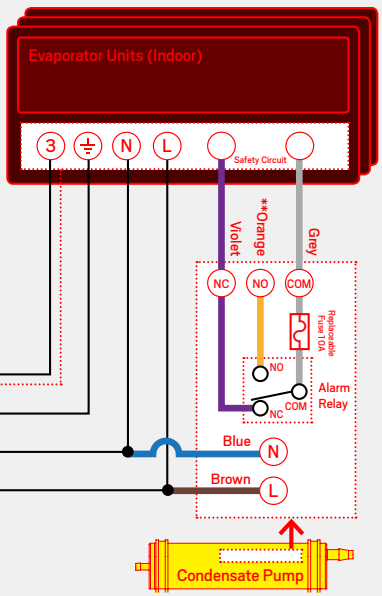
| Power Up LED Sequence | | | |
|-----------------------|-------------------|-------------------|---------------------|
| Pump Status | Condensate Level | Default Operation | Fail-Safe Operation |
| Unpowered | N/A | | |
| Powered | Below Alarm Level | | |
| Powered | Alarm-Activated | | |

To change Alarm Relay Operation:

- Unplug pump
- Move DIP switch positions to
- Plug pump in
- Wait for one green LED blink
- Move DIP switch positions to
- Wait for one red LED blink
- Reset DIP switch positions to
- Wait for one green LED blink
- Unplug pump
- Set the DIP switches back to the desired capacity configuration. (Low, Medium-Low, Medium-High, High)
- Plug Pump in and check that power up LED sequence matches the desired alarm relay operation
- Done.

To reset default alarm relay operation repeat steps 1 thru 11.

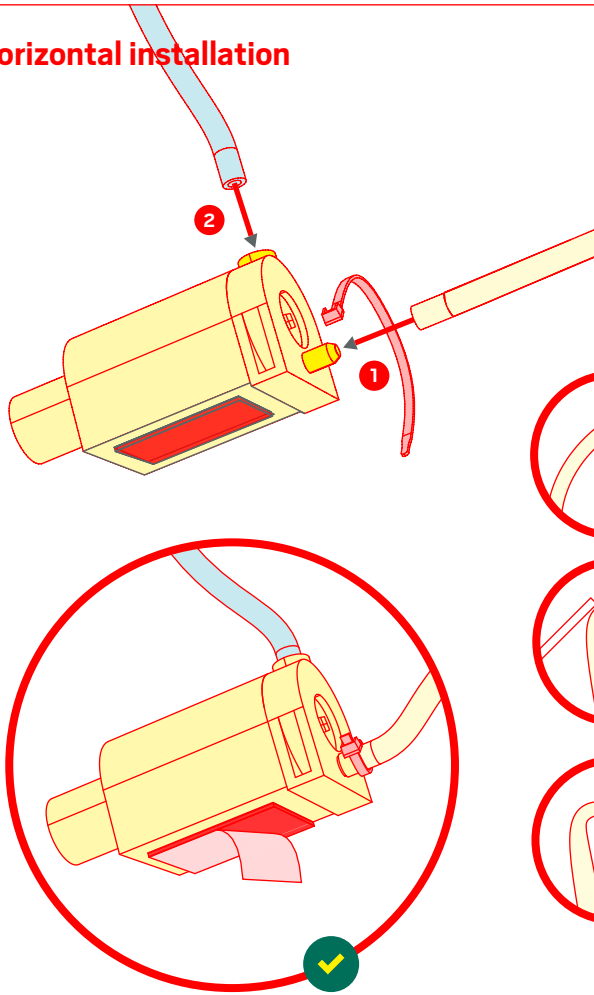
When Multi-Split System is installed



****Orange:**
To use fail-safe operation.
1. Remove the violet wire from indoor live.
2. Connect the orange wire to indoor live.
3. Change alarm relay to fail-safe operation.

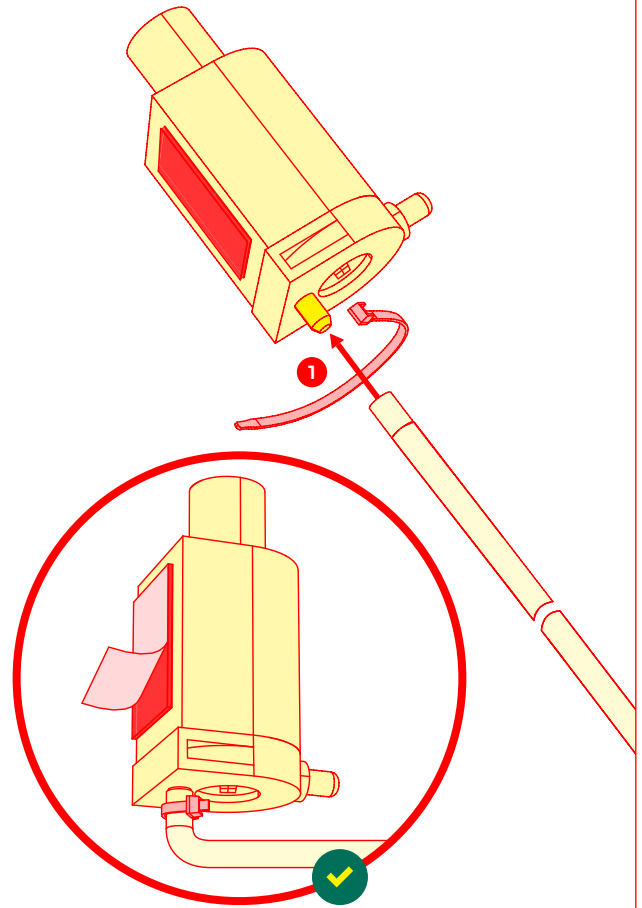
4a

Horizontal installation



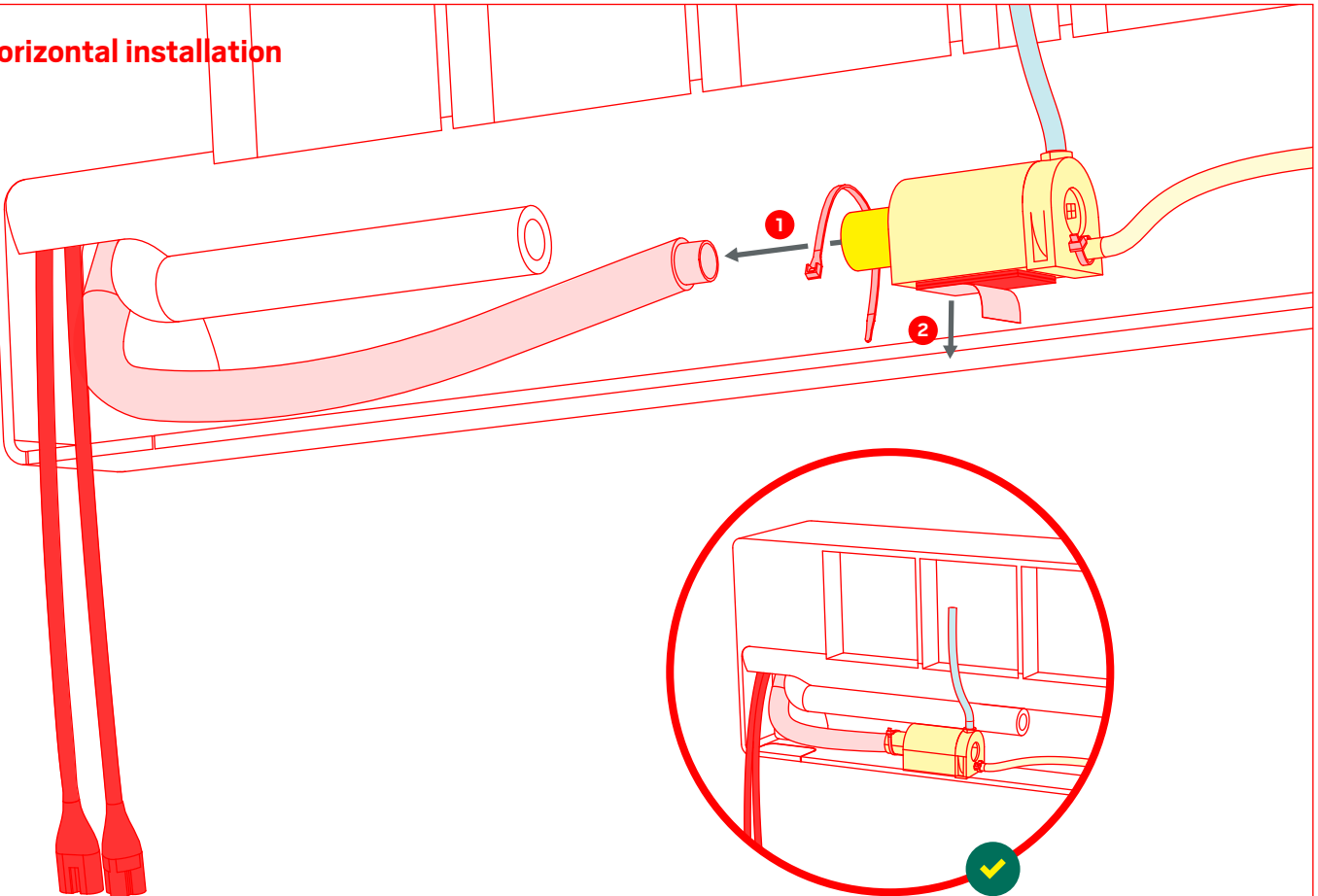
4b

Vertical installation



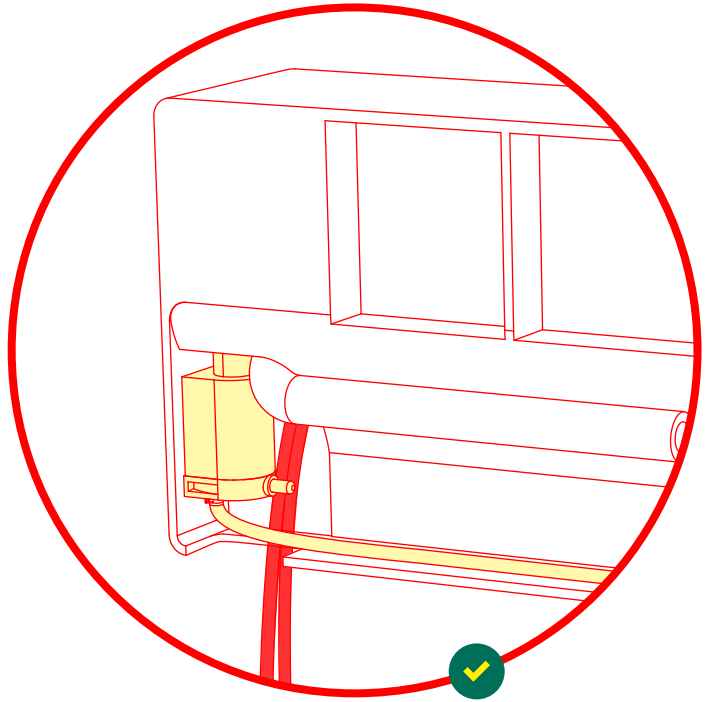
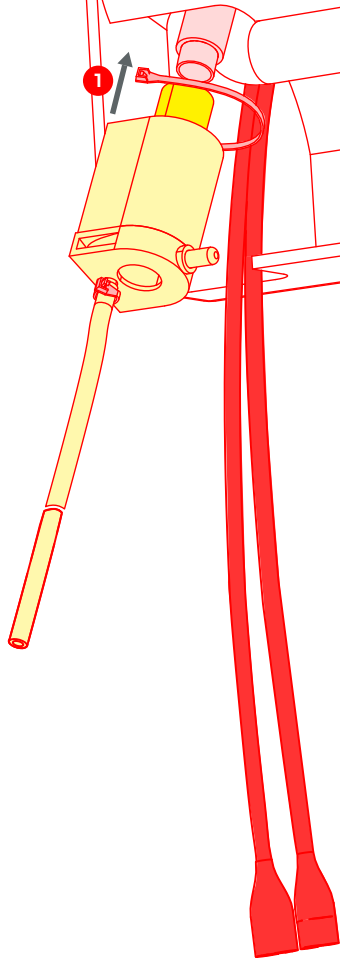
5a

Horizontal installation

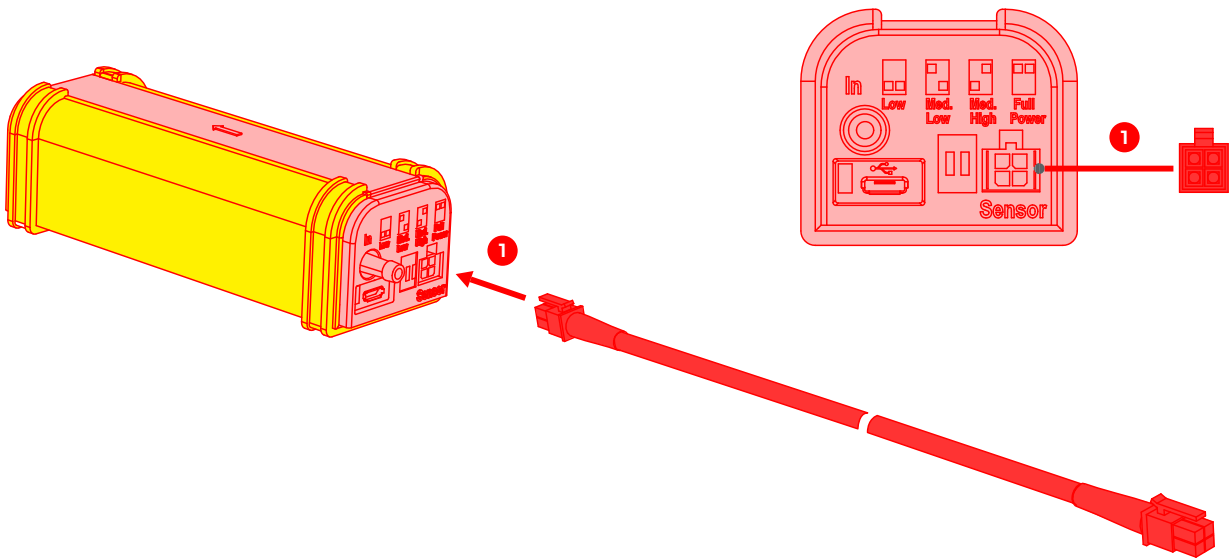


5b

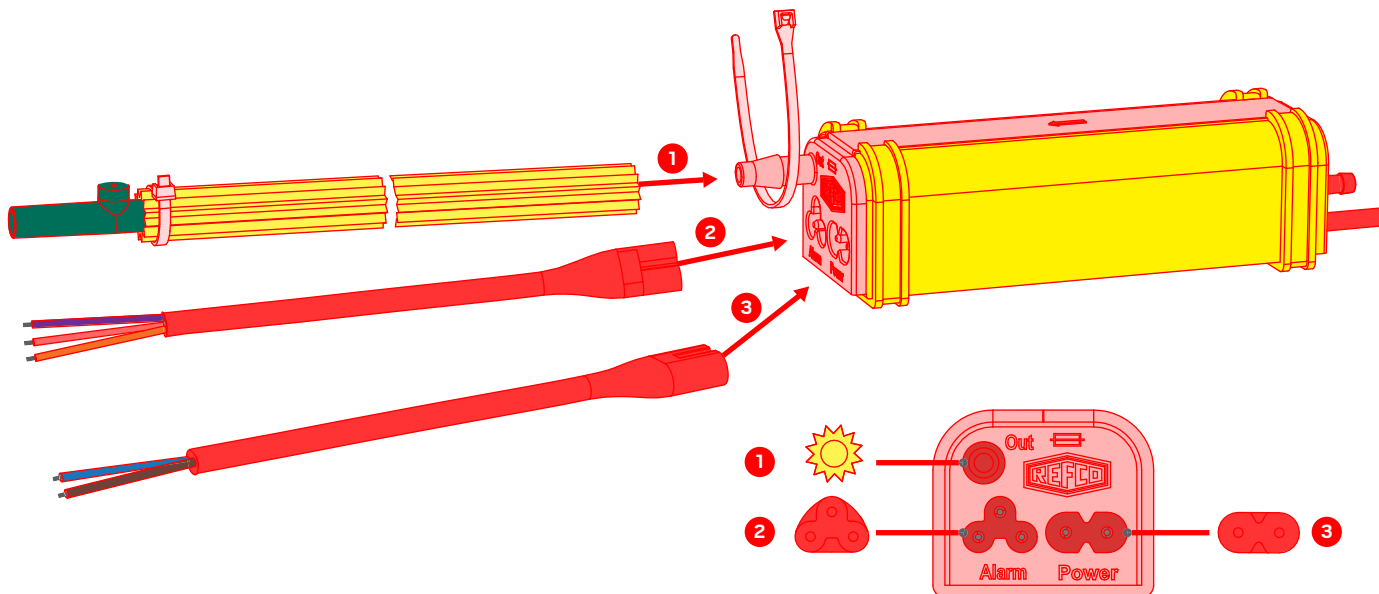
Vertical installation



6

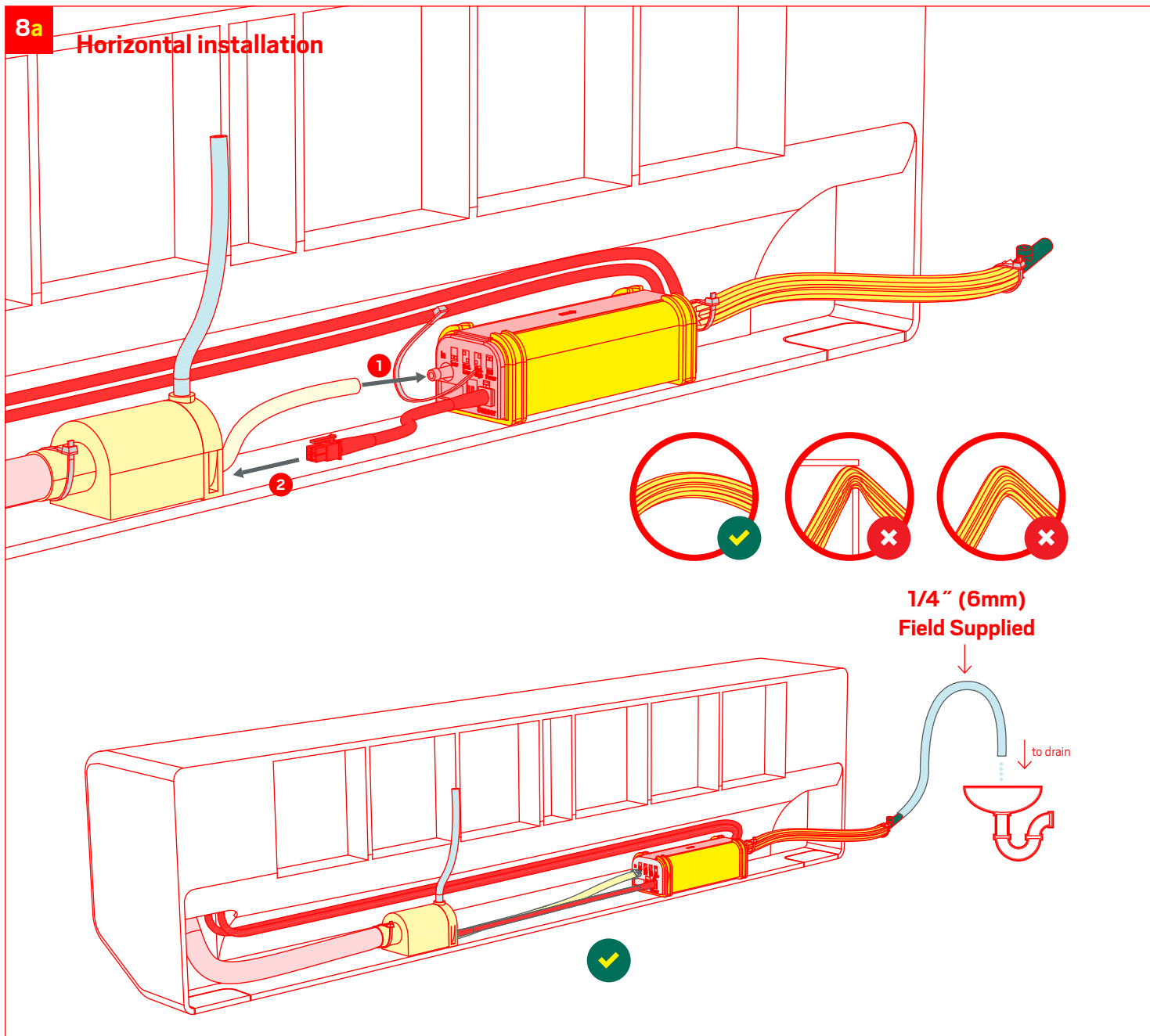


7



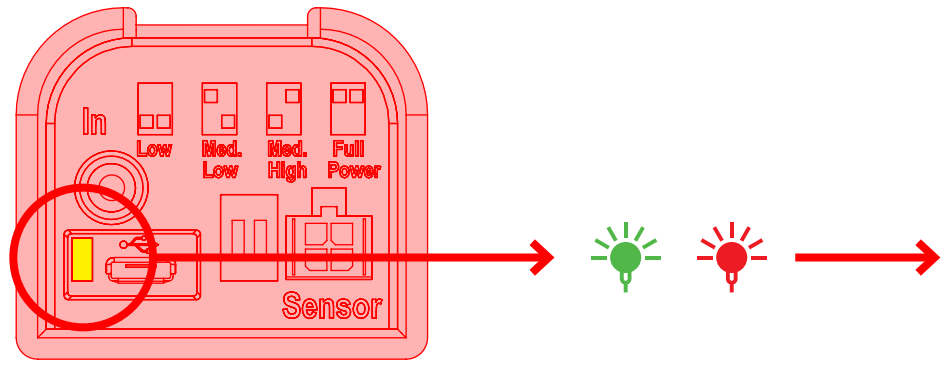
8a

Horizontal installation



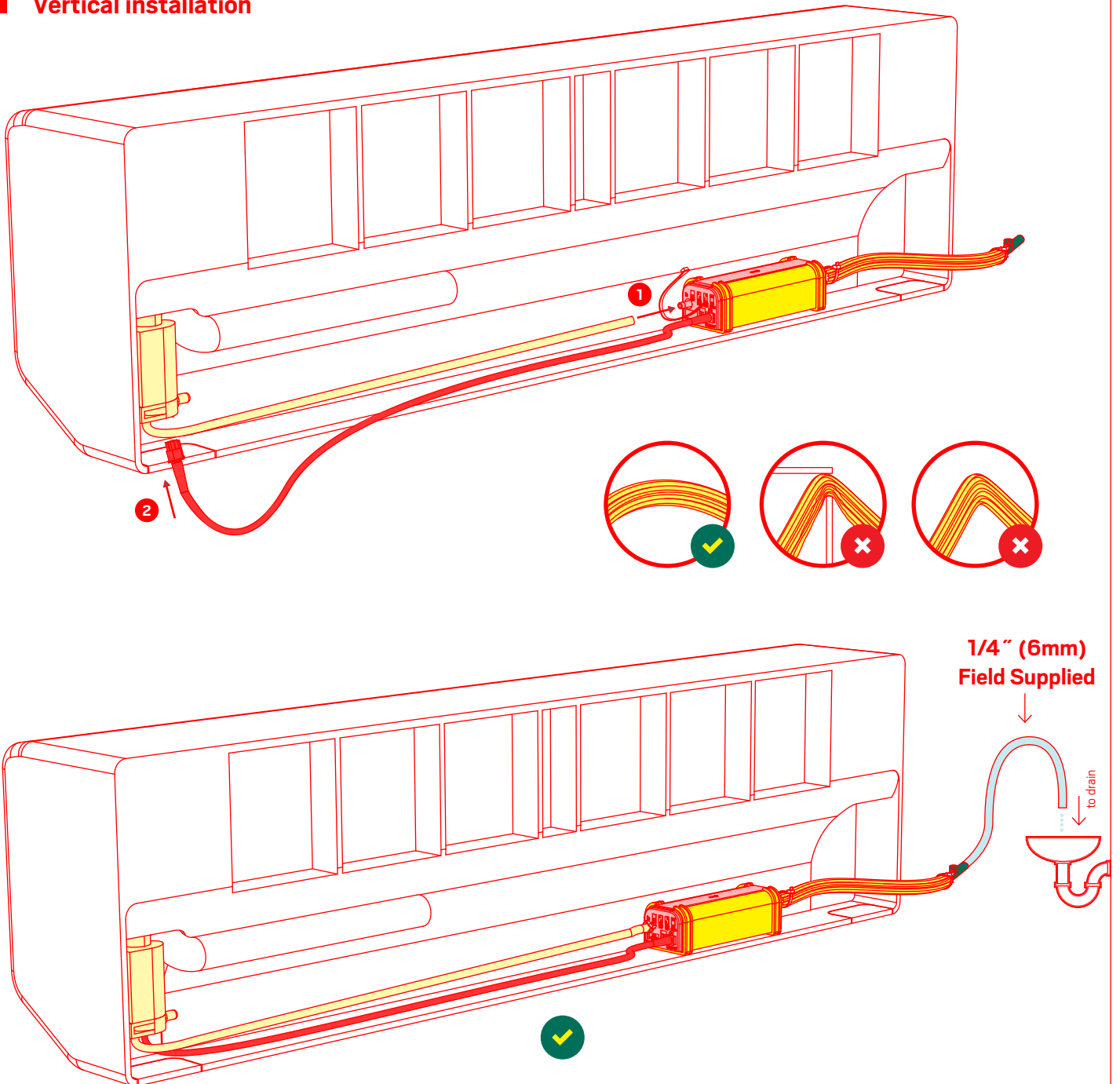


LED check



8b

Vertical installation



| | | | | | | | |
|-----------|---------------------------|------------------|-------|------------------|-------|------------------|--|
| LED Check | No Power | (off) | (off) | (off) | (off) | (off) | Pump is miswired or no incoming voltage. Alarm fuse has been burned. Problem with A/C system or alarm is miswired. |
| | Power up LED sequence | 1 sec Red/Green | (off) | 1 sec Red/Green | (off) | 1 sec Red/Green | Alternating red/ green flashes 5x only then stop and go to standby (default relay operation). |
| | Standby waiting for water | 1 sec Green | (off) | 1 sec Green | (off) | 1 sec Green | Blinking Green continuously. |
| | Pumping water | Solid Green on | | | | | Running in low, med low, med high, or high power config. normal operation. |
| | High water level mode | 1 sec Red | (off) | 1 sec Red | (off) | 1 sec Red | Running above high water level. |
| | Alarm relay activated | Solid Red on | | | | | Pump cannot keep up with water input. Prevent flooding break power to A/C. |
| | Reconfigure code | 3x red, 3x green | (off) | 3x red, 3x green | (off) | 3x red, 3x green | Pump has had 3 extra long run cycles, reconfigure for more power. |

| | | | | | | | |
|-----------|---------------------------|------------------|-------|------------------|-------|------------------|---|
| LED Check | Kein Strom | (aus) | (aus) | (aus) | (aus) | (aus) | Pumpe ist falsch angeschlossen oder es liegt keine Spannung am Stromversorgungseingang an. Alarmsicherung ist durchgebrannt. Problem mit dem A/C [Wechselstrom] System oder Alarm ist falsch angeschlossen. |
| | LED Einschalt-Sequenz | 1 Sek Rot / Grün | (off) | 1 Sek Rot / Grün | (aus) | 1 Sek Rot / Grün | Blinkt abwechselnd 5 x nur Rot / Grün, stoppt dann und geht in den Standby über (Standard Relais-Betrieb). |
| | Standby Auf Wasser warten | 1 Sek Grün | (aus) | 1 Sek Grün | (aus) | 1 Sek Grün | Blinkt kontinuierlich grün. |
| | Wasser wird gepumpt | Grün ständig an | | | | | Lauf in niedriger, mittlerer niedriger, mittlerer hoher oder hoher Leistungskonfiguration, normaler Betrieb. |
| | Hoher Wasserstand Modus | 1 Sek Rot | (aus) | 1 Sek Rot | (aus) | 1 Sek Rot | Läuft über Hochwasser-Stand. |
| | Alarmrelais aktiviert | Rot ständig an | | | | | Pumpe kann mit Wasserzufuhr nicht mithalten. Zur Vermeidung von Überschwemmungen / Überlauf die Stromversorgung abschalten. |
| | Code für Neukonfiguration | 3x Rot, 3x Grün | (aus) | 3x Rot, 3x Grün | (aus) | 3x Rot, 3x Grün | Pumpe hatte 3 zusätzliche lange Laufzyklen, Neukonfiguration für mehr Leistung. |

| | | | | | | | |
|-------------|-------------------------|----------------------|----------|---------------------|----------|---------------------|---|
| Voyants LED | Pas de courant | (éteint) | (éteint) | (éteint) | (éteint) | (éteint) | La pompe est mal câblée, ou aucune tension n'arrive. Le fusible d'alarme a grillé. Problème d'A/C ou alarme mal câblée. |
| | Séquence LED d'allumage | 1 sec Rouge/Vert | (éteint) | 1 sec Rouge/Vert | (éteint) | 1 sec Rouge/Vert | Clignotement alternatif rouge/ vert 5 fois, puis arrêt et passage en veille (fonctionnement relais par défaut). |
| | Veille en attente d'eau | 1 sec Vert | (éteint) | 1 sec Vert | (éteint) | 1 sec Vert | Clignotement vert continu. |
| | Pompage de l'eau | Vert allumé en fixe | | | | | Marche en configuration normale puissance basse, moyenne basse, moyenne haute ou haute. |
| | Mode niveau d'eau élevé | 1 sec Rouge | (éteint) | 1 sec Rouge | (éteint) | 1 sec Rouge | Dépassement du niveau d'eau élevé. |
| | Relais d'alarme activé | Rouge allumé en fixe | | | | | La pompe ne peut absorber l'eau entrante. Pour éviter l'inondation, coupure du courant de l'A/C. |
| | Code de reconfiguration | 3 x rouge, 3 x vert | (éteint) | 3 x rouge, 3 x vert | (éteint) | 3 x rouge, 3 x vert | La pompe dispose de 3 cycles de fonctionnement très longs, reconfigurez pour plus de puissance. |

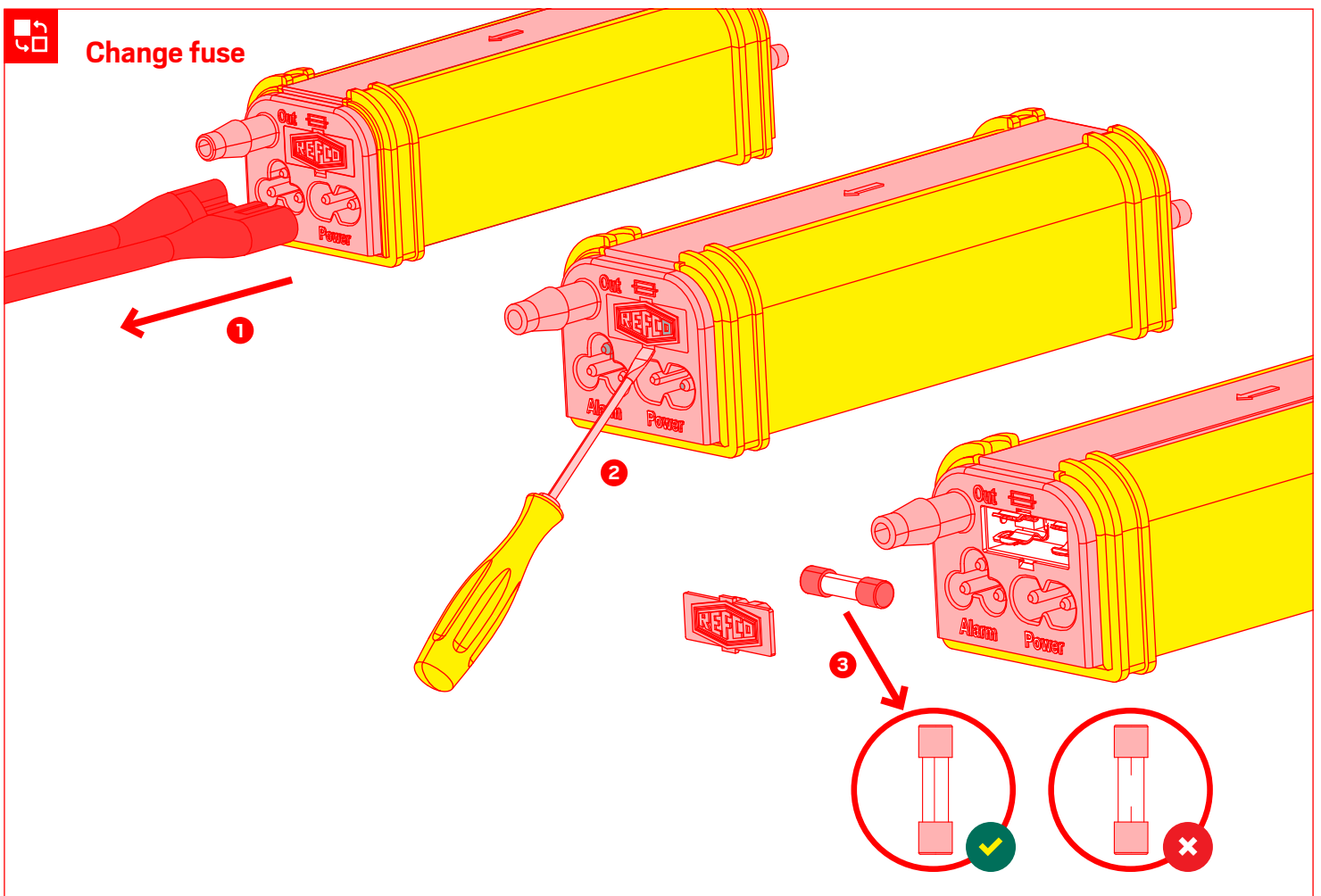
| | | | | | | | |
|---------------------|--|------------------------------|-------|------------------------------|-------|------------------------------|---|
| Chequeo de los LEDs | Falta de energía de alimentación | (off) | (off) | (off) | (off) | (off) | La bomba no ha sido correctamente cableada o no tiene tensión de entrada. El fusible de alarma se ha fundido. Problema con el sistema A/C o la alarma no está correctamente cableado. |
| | Energía al cabo de la secuencia de luces LED | 1 segundo luz roja y verde | (off) | 1 segundo luz roja y verde | (off) | 1 segundo luz roja y verde | Las luces roja y verde se encienden alternadamente 5 veces, después de lo cual se activa el STOP y la bomba pasa al estado standby (el relé funciona por defecto). |
| | Standby del sistema esperando la presencia de agua | 1 segundo luz verde | (off) | 1 segundo luz verde | (off) | 1 segundo luz verde | La luz verde parpadea de modo continuo. |
| | Agua bombeada | luz verde permanente | | | | | Funcionamiento a potencia "baja", "media", "medio baja", "medio alta" o "alta". Configuración normal: potencia "alta". |
| | Modo "elevado nivel de agua" | 1 segundo luz roja | (off) | 1 segundo luz roja | (off) | 1 segundo luz roja | Funcionamiento por encima del nivel de agua. |
| | El relé de alarma se ha activado | luz roja permanente | | | | | La bomba no puede con el caudal de agua entrante. Prevenir inundación. Ajustar la potencia a A/C. |
| | Reconfigurar el correspondiente código | 3 x luz roja / 3 x luz verde | (off) | 3 x luz roja / 3 x luz verde | (off) | 3 x luz roja / 3 x luz verde | La bomba ha ejecutado 3 ciclos de servicio extra prolongados. Reconfigurar para obtener más potencia. |

| | | | | | | | |
|----------|-----------------------------|--------------------|-------|--------------------|-------|--------------------|--|
| Spie LED | Tutto spento | (off) | (off) | (off) | (off) | (off) | La pompa è cablata male o non vi è tensione in ingresso. Il fusibile dell'allarme è bruciato. Problema con il Sistema A/C Oppure l'allarme è cablato male. |
| | Sequenza LED di accensione | 1 sec Rosso/Verde | (off) | 1 sec Rosso/Verde | (off) | 1 sec Rosso/Verde | Rosso/Verde in alternanza lampeggia solo 5x quindi si ferma e va in standby (mancanza funzionamento relè). |
| | Standby in attesa di acqua | 1 sec Verde | (off) | 1 sec Verde | (off) | 1 sec Verde | Verde lampeggiante in continuo. |
| | Pompeggio acqua | Verde fisso on | | | | | Funzionante in basso, med basso, med alto, o config alta potenza funzionamento normale. |
| | Modalità alto livello acqua | 1 sec Rosso | (off) | 1 sec Rosso | (off) | 1 sec Rosso | Funzionante al di sopra livello alto acqua. |
| | Relè di allarme attivo | Rosso fisso acceso | | | | | La pompa non può far fronte all'ingresso di acqua. Per prevenire allagamento si interrompe alimentazione ad A/C. |
| | Codice riconfigurazione | 3x rosso, 3x verde | (off) | 3x rosso, 3x verde | (off) | 3x rosso, 3x verde | La pompa ha avuto 3 cicli di funzionamento eccessivamente lunghi, riconfigurazione per maggiore potenza. |

| | | | | | | | |
|--------|-----------|------------|-----|------------|-----|------------|--------------------------------------|
| LED 检查 | 无通电 | (灭) | (灭) | (灭) | (灭) | (灭) | 泵接线错误或无进入电压。报警保险丝已烧毁。空调系统故障 或报警接线错误。 |
| | 通电 LED 序列 | 1 秒红/绿 | (灭) | 1 秒红/绿 | (灭) | 1 秒红/绿 | 交替红/绿闪烁 5 次, 然后停止并进入待机状态 (默认继电器操作)。 |
| | 待机等待水 | 1 秒绿 | (灭) | 1 秒绿 | (灭) | 1 秒绿 | 持续闪烁绿灯。 |
| | 泵水 | 持续亮绿灯 | | | | | 以低、中低、中高或高功率配置正常操作运行。 |
| | 高水位模式 | 1 秒红 | (灭) | 1 秒红 | (灭) | 1 秒红 | 在高水位以上运行。 |
| | 报警继电器激活 | 持续亮红灯 | | | | | 泵跟不上水输入速度。防止溢流, 断开空调电源。 |
| | 重新配置代码 | 3x 红, 3x 绿 | (灭) | 3x 红, 3x 绿 | (灭) | 3x 红, 3x 绿 | 泵经过 3 次超长运行循环, 重新配置以获得更大功率。 |

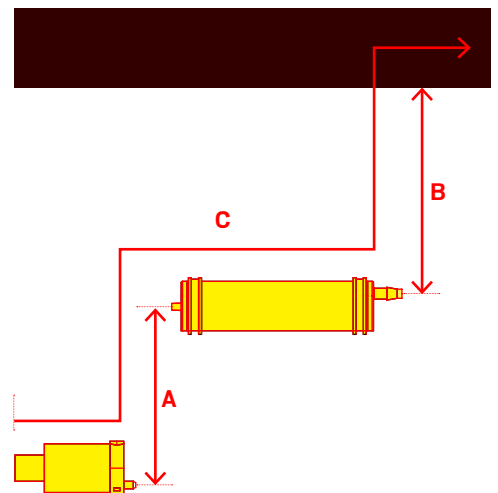


Change fuse



Corrected Flow Based on Installation L/Hr. 1/4" (6mm) discharge tube @ full power

| A | B | C | | | | |
|-----------------|-------------------------|---------------------------|----|----|----|----|
| | | Total Length (Run) Meters | | | | |
| Suction (lift) | Discharge (Rise) Meters | 5 | 10 | 15 | 20 | 30 |
| 0.0 m | 0 | 42 | 42 | 40 | 40 | 40 |
| | 1 (3.3ft.) | 42 | 42 | 40 | 40 | 36 |
| | 3 (9.9 ft.) | 37 | 37 | 35 | 35 | 34 |
| | 5 (16.4 ft.) | 31 | 30 | 29 | 29 | 29 |
| | 10 (32.8 ft.) | 17 | 16 | 15 | 14 | 14 |
| | 15 (49.2 ft.) | 9 | 9 | 9 | 9 | 8 |
| 1.0 m (3.3 Ft) | 0 | 42 | 42 | 42 | 40 | 40 |
| | 1 (3.3ft.) | 42 | 42 | 42 | 40 | 39 |
| | 3 (9.9 ft.) | 36 | 36 | 35 | 35 | 34 |
| | 5 (16.4 ft.) | 30 | 30 | 29 | 29 | 29 |
| | 10 (32.8 ft.) | 16 | 16 | 16 | 16 | 15 |
| | 15 (49.2 ft.) | 10 | 10 | 10 | 10 | 10 |
| 2.0 m (6.6 Ft.) | 0 | 35 | 35 | 35 | 35 | 34 |
| | 1 (3.3ft.) | 33 | 33 | 33 | 32 | 31 |
| | 3 (9.9 ft.) | 33 | 32 | 31 | 31 | 30 |
| | 5 (16.4 ft.) | 27 | 26 | 26 | 26 | 25 |
| | 10 (32.8 ft.) | 17 | 17 | 16 | 16 | 15 |
| | 15 (49.2 ft.) | 10 | 10 | 10 | 9 | 9 |
| 3.0 m (9.9 Ft.) | 0 | 30 | 30 | 30 | 30 | 29 |
| | 1 (3.3ft.) | 28 | 28 | 28 | 28 | 27 |
| | 3 (9.9 ft.) | 28 | 28 | 28 | 27 | 26 |
| | 5 (16.4 ft.) | 23 | 23 | 23 | 23 | 22 |
| | 10 (32.8 ft.) | 15 | 15 | 15 | 15 | 15 |
| | 15 (49.2 ft.) | 7 | 7 | 6 | 5 | 5 |



Conversion formula for US Gallons/Hr:

$$\text{L/Hr.} \times 0.264 = \text{G/Hr.}$$

REFCO®

REFCO is a registered trademark in various countries. Patent Pending.
 © Copyright 2016 by REFCO Manufacturing Ltd. Switzerland – all rights reserved.
 More information: visit www.refco.ch