

# RXLE20

Resistenza elettrica per ventilconvettori cassette FCL  
Electric heater for FCL cassette fan coils  
Résistance électrique pour ventilo-convecteurs cassettes FCL  
Elektrisches Heizelement für Kassetten-Gebläsekonvektoren FCL  
Resistencia eléctrica para ventilconvectores de cajas FCL

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**SCHEMI ELETTRICI • WIRING DIAGRAMS • SCHEMAS ELECTRIQUES**  
**SCHALTPLÄNE • ESQUEMAS ELECTRICOS**

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## AERMEC S.p.A.

I-37040 Bevilacqua (VR) Italia – Via Roma, 996  
Tel. (+39) 0442 633111  
Telefax (+39) 0442 93730 – (+39) 0442 93566  
www.aermec.com - info@aermec.com

Il kit resistenza elettrica per riscaldamento RXLE20 è stato progettato per essere montato solo sui ventilconvettori di nostra produzione della serie FCL e solo se abbinati agli accessori GLL20R. Non sono consentite altre applicazioni o abbinamenti perchè possono provocare danni alle persone e alle cose.

### DICHIARAZIONE DI CONFORMITÀ CE

Noi, firmatari della presente, dichiariamo sotto la nostra esclusiva responsabilità, che il prodotto:

#### KIT RESISTENZA ELETTRICA serie RXLE20

al quale questa dichiarazione si riferisce è conforme alle seguenti norme armonizzate:

- CEI EN 60335-2-40
- CEI EN 55014-1
- CEI EN 55014-2
- CEI EN 61000-6-1
- CEI EN 61000-6-2
- CEI EN 61000-6-3
- CEI EN 61000-6-4

soddisfando così i requisiti essenziali delle seguenti direttive:

- Direttiva LVD 2006/95/CE
- Direttiva compatibilità elettromagnetica 2004/108/CE

Le kit résistance électrique pour chauffage RXLE20 a été conçu pour n'être monté que sur les ventil-convecteurs de notre fabrication de la série FCL et uniquement en combinaison avec les accessoires GLL20R. Aucune autre application ou combinaison n'est permise parce qu'elle pourrait provoquer des dommages aux personnes et aux choses.

### CERTIFICAT DE CONFORMITE CE

Nous soussignés déclarons sous notre exclusive responsabilité que le produit:

#### RESISTANCE ELECTRIQUE série RXLE20

auquel cette déclaration fait référence, est conforme aux normes harmonisées suivantes:

- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- CEI EN 61000-6-1
- CEI EN 61000-6-2
- CEI EN 61000-6-3
- CEI EN 61000-6-4

satisfaisant ainsi aux conditions essentielles des directives suivantes:

- Directive LVD 2006/95/CE
- Directive compatibilité électromagnétique 2004/108/CE

El kit resistencia eléctrica para calefacción RXLE20 ha sido diseñado para montarse solo en los ventilconvectores de nuestra producción de la serie FCL y solo si se combinan con los accesorios GLL20R. No se permiten otras aplicaciones o combinaciones porque pueden provocar daños a las personas o cosas.

### DECLARACIÓN DE CONFORMIDAD CE

Los que suscriben la presente declaran bajo la propia y exclusiva responsabilidad que el conjunto en objeto, definido como sigue:

#### RESISTENCIA ELÉCTRICA serie RXLE20

Al que esta declaración se refiere, está en conformidad a las siguientes normas armonizadas:

- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- CEI EN 61000-6-1
- CEI EN 61000-6-2
- CEI EN 61000-6-3
- CEI EN 61000-6-4
- EN 61000-6-3

al que esta declaración se refiere, está en conformidad a las siguientes normas armonizadas:

- Directiva LVD 2006/95/CE
- Directiva compatibilidad electromagnético 2004/108/CE

Bevilacqua, 07/06/2011

The electric heater kit for RXLE20 heating has been designed to be mounted only onto the FCL fan coils we produce and only if coupled with GLL20R accessories. Other applications and couplings are not allowed because they can cause injury/damage to persons/objects.

### CE CONFORMITY DECLARATION

We the undersigned declare, under our own exclusive responsibility, that the product:

#### ELECTRIC HEATER KIT RXLE20 series

to which this declaration refers, complies with the following standardised regulations:

- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- CEI EN 61000-6-1
- CEI EN 61000-6-2
- CEI EN 61000-6-3
- CEI EN 61000-6-4

thus meeting the essential requisites of the following directives:

- Directive LVD 2006/95/CE
- EMC Electromagnetic Compatibility Directive 2004/108/CE

Der Bausatz Elektrischer Heizwiderstand RXLE20 wurde nur für die Montage an den Gebläsekonvektoren unserer Produktion der Serie FCL geplant und nur, wenn diese mit den Zubehörsätzen GLL20R kombiniert werden. Andere Anwendungen oder Kombinationen sind nicht zulässig, da sie zu Personen- und Sachschäden führen können.

### CE KONFORMITÄTSEKTLÄRUNG

Wir, die hier Unterzeichnenden, erklären auf unsere ausschließliche Verantwortung, dass das Produkt:

#### ELEKTRISCHER HEIZWIDERSTAND der Serie RXLE20

auf das sich diese Erklärung bezieht, den folgenden harmonisierten Normen entspricht:

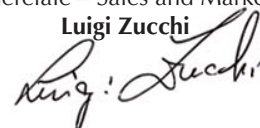
- EN 60335-2-40
- EN 55014-1
- EN 55014-2
- CEI EN 61000-6-1
- CEI EN 61000-6-2
- CEI EN 61000-6-3
- CEI EN 61000-6-4

womit die grundlegenden Anforderungen folgender Richtlinien erfüllt werden:

- Richtlinie LVD 2006/95/CE
- Richtlinie zur elektromagnetischen Verträglichkeit 2004/108/CE

La Direzione Commerciale – Sales and Marketing Director

Luigi Zucchi



Resistance functioning is controlled by a thermal fuse - probe applied directly to the resistance.  
 When the thermal fuse - probe intervenes, it cuts the resistance off.  
 Any intervention of the thermal fuse - probe leads to replacement of the same in order to restore normal functioning.

**INSTALLATION**

**WARNING: before carrying out any intervention, make sure that the electric power supply has been disconnected.**

**CAUTION: before carrying out any work, wear the appropriate individual protection devices.**

**WARNING: the appliance must be installed in compliance with national regulations on this subject.**

**WARNING: the resistances reach high temperatures. Before intervening on the unit make sure that the temperatures of the components do not constitute a danger for the operator.**

**WARNING: in units with the RXLE accessory installed, the flow inlets must be free. The inlets must not be obstructed, even partially.**

**ATTENTION:** the electric connections, maintenance, the installation of the fan coils and their accessories must only be performed by subjects with the technical-professional requisites for enabling and installation, transformation, extension and maintenance of the systems and able to check the same for safety and functionality purposes (in this manual they will be indicated by the generic term "staff with specific technical skill").

**ATTENTION:** Do not allow the appliance to be used by children or disabled people without relevant surveillance. Remember that the appliance is not a game.

Here find the essential indications for correct installation of the appliance. The completion of all operations, according to specific requirements, is left to the experience of the installer.

**ASSEMBLY SEQUENCE**

Apply the RXLE20 accessory before installing the FCL units. The RXLE20 accessory is supplied complete with all necessary elements for correct installation. It is the installer's responsibility to perform state-of-the-art assembly in compliance with Safety Standards.

**PRELIMINARY OPERATIONS:**

**ATTENTION:** fit an omnipolar magnet-circuit breaker (IG), max 10A 250V, to the power supply line with a minimum contact opening distance of 3 mm.

The power supply line must have section that is not less than 2.5 mm<sup>2</sup> with quality wire not less than N07V-K.

**OPERATIONS FOR ASSEMBLY OF THE RESISTANCES:**

- Remove the basin with grid from the FCL unit.
- Remove the fan from the FCL ventilation unit.
- Apply the resistance on the media present in the battery mounting brackets, (1)
- **WARNING:** The fixing position of the resistance is very important!
- The resistance has 4 metal references (2) in the 2 central elements of the coil. The metal reference must be inside the coil support bracket, as indicated in figure.
- The resistance element (4) with thermal fuse-probe must be positioned in the side opposite the base.
- Block the resistance with the four locking elements supplied (6) applied to the battery bracket and secured with a screw.
- Remove the actuator unit (8) from the valve of the FCL to increase the space available in the hydraulic fittings compartment.
- Connect the resistance cables to the connector (7) in the ventilation compartment.
- Gather the resistance cables and take the excess length to the outside of the bulkhead (9), into the hydraulic fittings compartment, through the rubber fairlead (10). The cable-tensioner clip fixed outside the bulkhead is used to fix the length of the excess cable.
- **ATTENTION:** Check that the cables are not close to the surface of the resistances, that they adhere to the bulkhead so as not to interfere with the fan coil, that they do not meet sharp surfaces on their run and do not undergo traction.
- Re-mount the actuator unit on the valve of the FCL.
- Re-mount the fan on the FCL ventilation unit.
- Re-mount the basin and the grid and fix them.
- **ATTENTION:** do not use the connection V1, but only connections V2, V3 and V4.
- Carry out the tests and verifications necessary to guarantee state-of-the-art installation.

**MAINTENANCE**

**WARNING: it is mandatory to use suitable individual protection devices.**

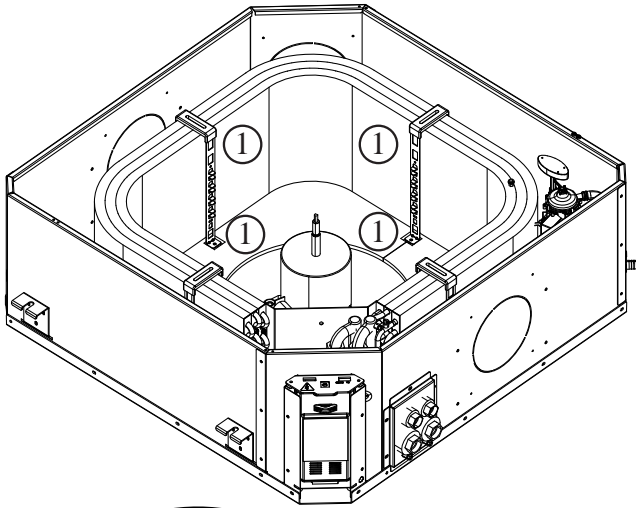
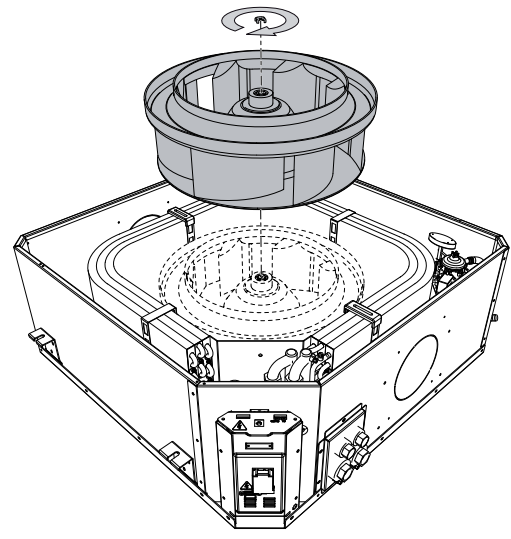
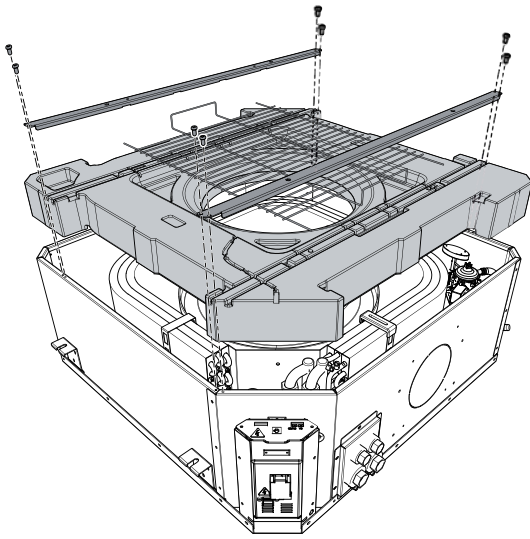
**WARNING: the resistances reach high temperatures. Before intervening on the unit make sure that the temperatures of the components do not constitute a danger for the operator.**

Maintenance can only be performed by staff with specific technical skill.

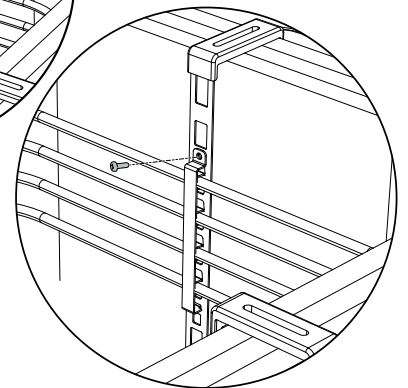
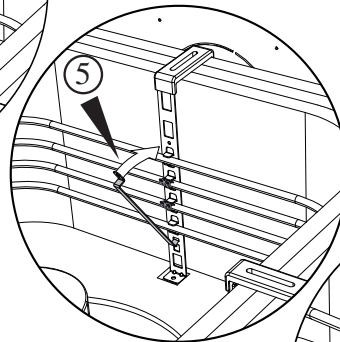
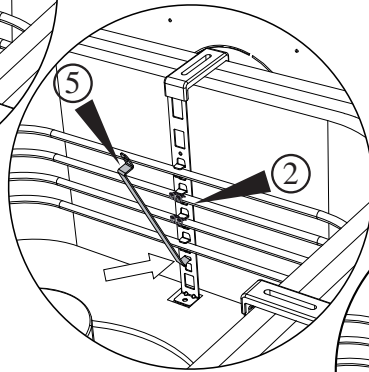
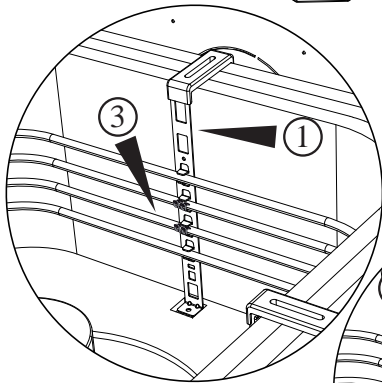
Before reactivating the resistance, after the intervention of the safety devices, look for the cause and restore the conditions for functioning in safety.

The thermal fuse cuts off functioning just of the electric resistance. Access inside the unit to replace it.

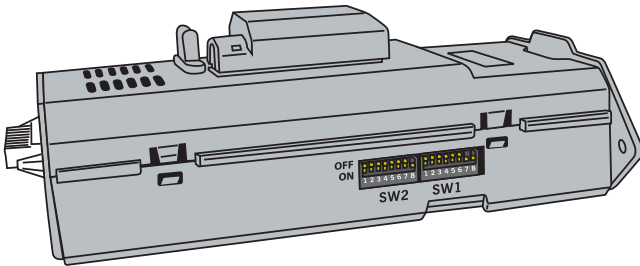
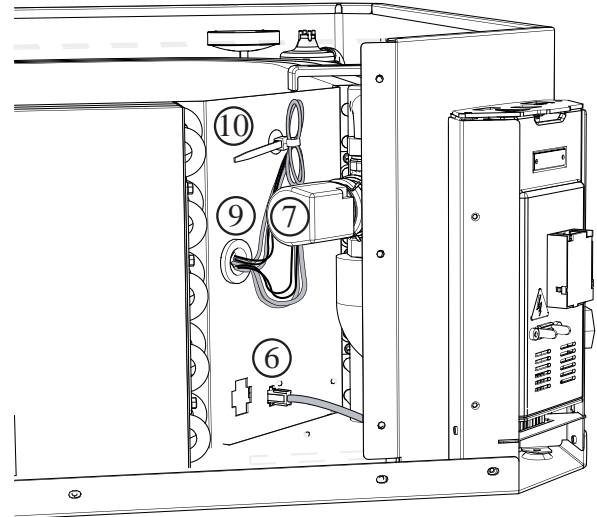
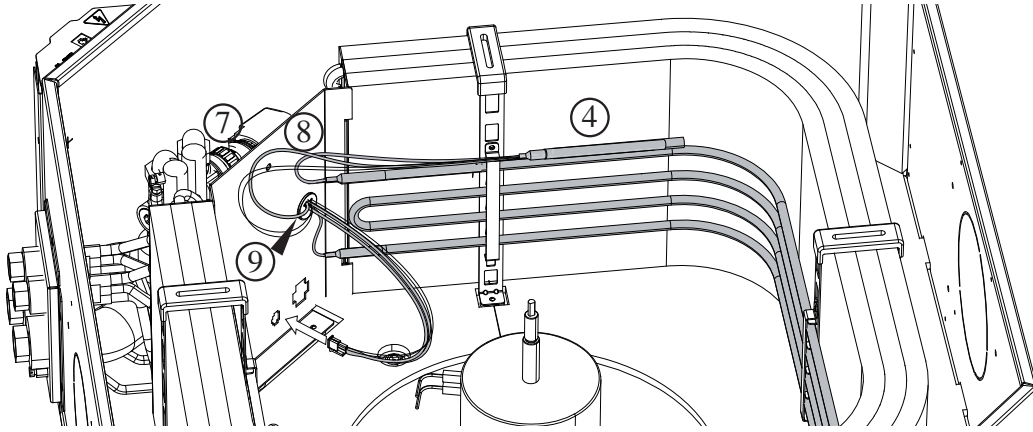
|   |            |
|---|------------|
| Electric power supply   | 230V~ 50Hz |
| Resistance heating capacity   | 1400W      |
| Electric resistance input power                                     | 6.1A       |
| Thermal fuse intervention temperature                               | 192°C      |
| Maximum functioning temperature of the resistances                  | 300°C      |
| Temperature limits for cables and silicone joints of the resistance | -50÷150°C  |
| Maximum temperature limit for the cables of the thermocouple probe  | 220°C      |



- 1 battery support brackets and support resistance in stainless steel
- 2 References to the metal resistance
- 3 Electrical resistance
- 4 Thermal Probe
- 5 Elements of blocking resistance
- 6 Connector compartment
- 7 Group of the valve actuator
- 8 Bulkhead
- 9 rubber grommet.
- 10 Clip tensioner



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**DIP-SWITCH SETTINGS**

Remove voltage to the unit.  
 To be carried out in the installation phase by specialised staff.  
 SW2 contains settings that must not be modified (the default settings are given in the table).  
 By acting on the Dip-Switches of the SW1 the following functionalities are obtained:

**SW 2**

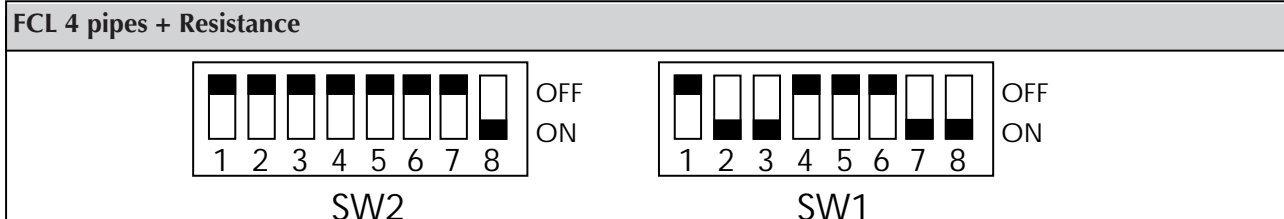
- Dip 1 (Default OFF)**  
Factory settings.
- Dip 2 (Default OFF)**  
Factory settings.
- Dip 3 (Default OFF)**  
Factory settings.
- Dip 4 (Default OFF)**  
Factory settings.
- Dip 5 (Default OFF)**  
Factory settings.
- Dip 6 (Default OFF)**  
Factory settings.
- Dip 7 (Default OFF)**  
Factory settings.
- Dip 8 (Default ON)**  
Factory settings.

**SW 1**




- Dip 1 (Default OFF)**  
Resistance control:  
 - functioning in integration mode, OFF  
 - functioning in replacement mode, ON
- Dip 2 (Default OFF)**  
**Presence of the resistance:**  
 - without resistance, OFF  
 - **with resistance, ON**
- Dip 3 (Default OFF)**  
Type of plant:  
 - 2 pipes (FCL32 - FCL 36 - FCL 42 - FCL 62), OFF  
 - 4 pipes (FCL34 - FCL 38 - FCL 44 - FCL 64), ON
- Dip 4 (Default OFF)**  
Factory settings.
- Dip 5 (Default OFF)**  
Factory settings.
- Dip 6 (Default OFF)**  
Ventilation control:  
 - continuous ventilation, OFF  
 - thermostat ventilation heating mode, ON.
- Dip 7 (Default ON)**  
Factory settings ON
- Dip 8 (Default ON)**  
Factory settings ON



**SOME EXAMPLES:**



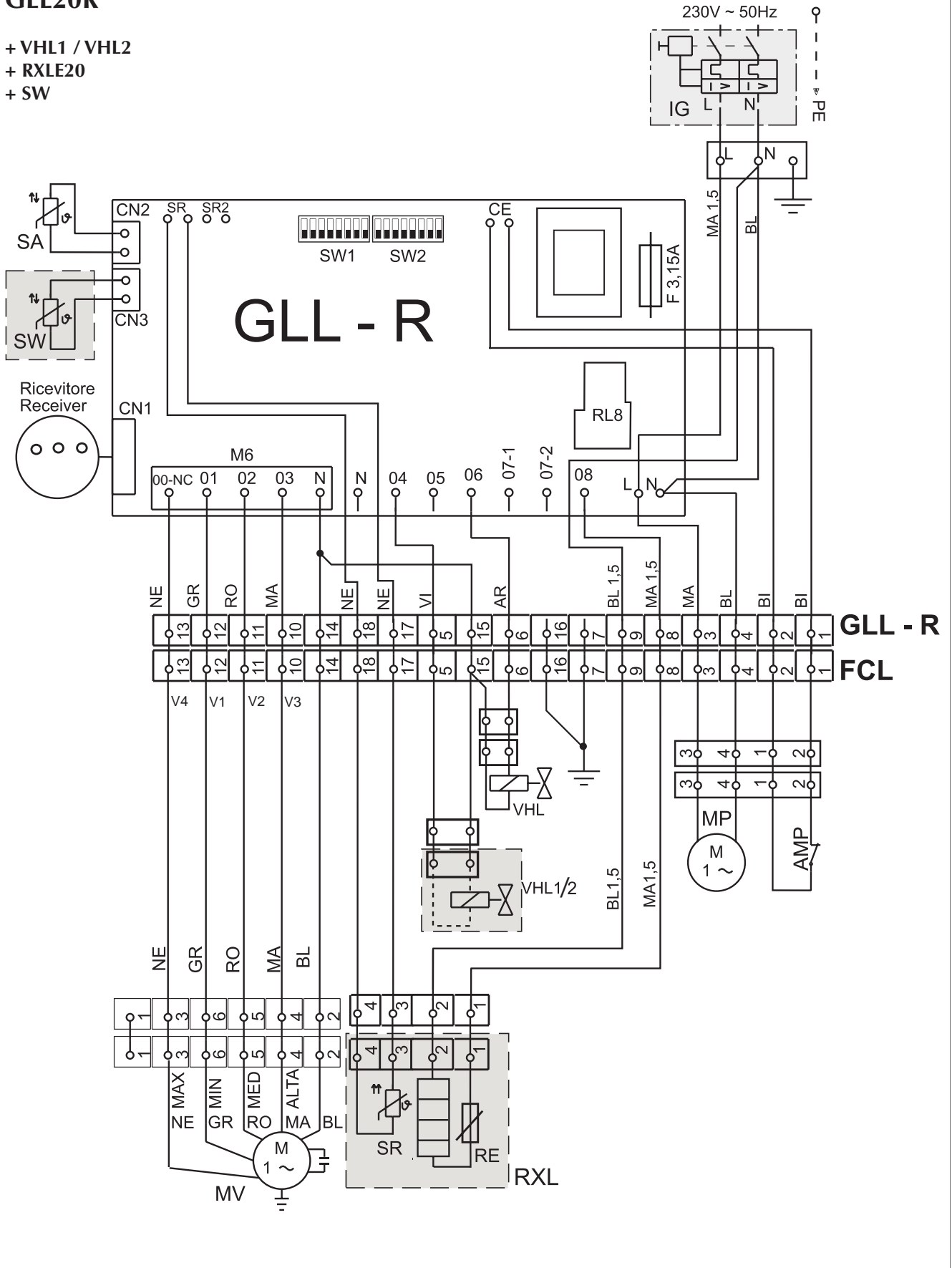
LEGENDA • READING KEY • LEGENDE • LEGENDE • LEYENDA

|   |  |   |
|---|--|---|
| <b>AL</b> = Alimentatore<br>Power supply<br>Alimentation électrique<br>Spannung<br>Alimentador  | <b>RE</b> = Resistenza elettrica<br><b>RX</b> Electric heater<br><b>RXL</b> Résistance électrique<br>Elt. Heizregister<br>Resistencia eléctrica  |  = Componenti non forniti<br>Components not supplied<br>Composants non fournis<br>Nicht lieferbare Teile<br>Componentes no suministrados   |
| <b>CE</b> = Contatto esterno<br><b>EX</b> External contact<br>Contact extérieur<br>Externer Kontakt<br>Contacto externo   | <b>SA</b> = Sonda ambiente<br>Room sensor<br>Sonde ambiante<br>Raumtemperaturfühler<br>Sonda ambiente  |  = Componenti forniti optional<br>Optional components<br>Composants en option<br>Optionsteile<br>Componentes opcionales  |
| <b>CN</b> = Connettore<br>Connector<br>Connecteur<br>Schütz<br>Conector   | <b>SC</b> = Scheda di controllo<br>Electronic control board<br>Platine de contrôle • Steuerschaltkreis<br>Tarjeta electrónica de control   |  = Collegamenti da eseguire in loco<br>On-site wiring<br>Raccordements à effectuer in situ<br>Vor Ort auszuführende Anschlüsse<br>Cableado in situ   |
| <b>CRE</b> = Contattore resistenza elettrica<br>Electric heater contactor<br>Contacteur résistance électrique<br>El. Heizregister-Schutz<br>Contactador de la resistencia eléctrica | <b>SW</b> = Sonda minima temperatura acqua<br>Water low temperature sensor<br>Sonde minimum temp. eau<br>Wasserfühler<br>Sonda temperatura mínima del agua                                       | <b>AR</b> = Arancio • Orange • Orange • Orange • Naranja<br><b>BI</b> = Bianco • White • Blanc • Weiss • Blanco<br><b>BL</b> = Blu • Blue • Bleu • Blau • Azul<br><b>GR</b> = Grigio • Grey • Gris • Gray • Gris<br><b>MA</b> = Marrone • Brown • Marron • Braun • Marrón<br><b>NE</b> = Nero • Black • Noir • Schwarz • Negro<br><b>RO</b> = Rosso • Red • Rouge • Rot • Rojo<br><b>VE</b> = Verde • Green • Vert • Grün • Verde<br><b>VI</b> = Viola • Violet • Violet • Violet • Violeta |
| <b>F</b> = Fusibile • Fuse • Fusible<br>Sicherung • Fusible   | <b>TR</b> = Trasformatore • Transformer<br>Transformateur<br>Transformator • Transformador   |   |
| <b>IG</b> = Interruttore generale • Main switch<br>Interrupteur général • Hauptschalter<br>Interruptor general  | <b>TSR</b> = Termostato a riarmo automatico<br>Automatic resetting thermostat<br>Thermostat à réarmement automatique<br>Thermostat automatischer Entriegelung<br>Termostato de rearme automático |   |
| <b>M</b> = Morsettiera • Terminal board<br>Boitier • Klemmleiste<br>Placa de bornes   | <b>TSRM</b> = Termostato a riarmo manuale<br>Manual resetting thermostat<br>Thermostat à réarmement manuel<br>Thermostat manuelle Entriegelung<br>Termostato de rearme manual                    |   |
| <b>ML</b> = Motore aletta<br>Louvre motor<br>Moteur deflecteur<br>Motor- Umlenkklappe<br>Lamas motorizadas  | <b>VHL</b> = Valvola solenoide • Solenoid valve<br><b>VCF</b> Vanne solenoide • Magnetventil<br>Válvula solenoide  |   |
| <b>MV</b> = Motore ventilatore • Fan motor<br>Moteur ventilateur • Ventilatormotor<br>Motor del ventilador  | <b>VC</b> = Valvola solenoide caldo<br>Solenoid valve hot<br>Vanne magnétique chaud<br>Magnetventil Heizbetrieb<br>Válvula solenoide para calor  |   |
| <b>NC</b> = Non collegato<br><b>00</b> Not connected<br>Non relié<br>Nicht angeschlossen<br>No conectado  | <b>VF</b> = Valvola solenoide freddo<br>Solenoid valve cold<br>Vanne magnétique froid<br>Magnetventil Kühlbetrieb<br>Válvula solenoide para frío   |   |
| <b>PE</b> = Collegamento a terra<br><b>GND</b> Earth connection<br>Mise à terre<br>Erdanschluss<br>Toma de tierra   |  |   |

Gli schemi elettrici sono soggetti ad un continuo aggiornamento, è obbligatorio quindi fare riferimento a quelli a bordo macchina. All wiring diagrams are constantly updated. Please refer to the ones supplied with the unit. Nos schémas électriques étant constamment mis à jour, il faut absolument se référer à ceux fournis à bord de nos appareils. Die Schaltpläne werden ständig aktualisiert, deswegen muss man sich stets auf das mit dem Gerät gelieferte Schaltschema beziehen. El cableado de las máquinas es sometido a actualizaciones constantes. Por favor, para cada unidad hagan referencia a los esquemas suministrados con la misma.

**FCL  
GLL20R**

- + VHL1 / VHL2
- + RXLE20
- + SW



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I dati tecnici riportati nella presente documentazione non sono impegnativi.

AERMEC S.p.A. si riserva la facoltà di apportare in qualsiasi momento tutte le modifiche ritenute necessarie per il miglioramento del prodotto.

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Im Sinne des technischen Fortschrittes behält sich Aermec S.p.A. vor, in der Produktion Änderungen und Verbesserungen ohne Ankündigung durchzuführen.

Los datos técnicos indicados en la presente documentación no son vinculantes.

Aermec S.p.A. se reserva el derecho de realizar en cualquier momento las modificaciones que estime necesarias para mejorar el producto.

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**AERMEC S.p.A.**

I-37040 Bevilacqua (VR) - Italia

Via Roma, 996 - Tel. (+39) 0442 633111

Telefax (+39) 0442 93730 - (+39) 0442 93566

www.aermec.com - info@aermec.com

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