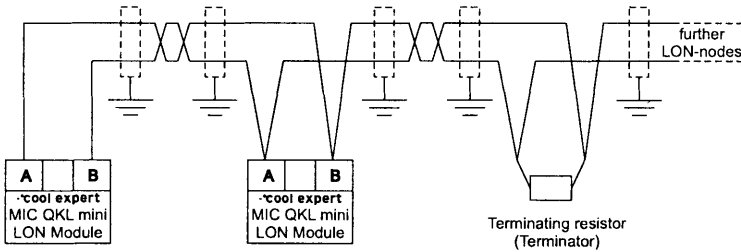


LON-Bus installation instructions

Completely install LON-Network, including the required terminators.

Registering the LON-Node with the Network: By changing the parameter "LSP" (LON Service Pin message) into "ON", or by disconnecting and switching on the current supply, a Service Pin message is send onto the connected LON-BUS. Thereby the node can be detected and installed by appropriate System Integration Software or the MIC EEC-datalogger.



Picture 4: connecting diagram MIC QKL mini LON transceiver (FTT 10A)

Note:

- Use only twisted, shielded cable as bus line.
- Connect every LON-Bus device with a pair of twisted cable.
- Ground the shield of the BUS connection on both sides inside the electrical cabinet.
- The terminating resistor(terminator) for the LON-network is available from Cool Expert under the abbreviated description "Abschlusswiderstand".

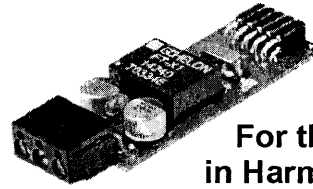
Wiring	Terminating resistor (Terminator)	Length of wiring
user-defined	at any place, RC-network with 52,3 Ohm	total wire length < 450 m node distance < 250 m
line (max. branch line < 3 m)	at each end, RC-network with 105 Ohm	wire total length < 900 m

Note:

Further wiring lengths, cable specifications and LON-Network topologies according to the terms of the actual Echelon® directive.

-°cool expert

MIC QKL mini LON Transceiver



For the Benefit of the Customer in Harmony with the Environment

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v1.7-en

Installation instruction

This brief installation manual gives a short review about the installation of the MIC QKL mini LON Transceiver.

Prior to begin any work on the MIC QKL mini LON Transceiver, these brief instruction has to be read and understood. When further questions occur, the manual of the MIC QKL mini multifunctional cooling control has to be consulted.

The installations of MIC QKL mini and MIC QKL mini LON Transceiver have to be done by authorized specialist companies only.

The national provisions and the applicable safety precautions have to be regarded. To tamper with or to change the controller MIC QKL mini or the MIC QKL mini LON Transceiver results in loss of warranty.

In case of questions regarding installation, application and operation please call our service.

Technical Data

Type	plug-in card for MIC QKL mini	
Supply voltage	by MIC QKL mini	
Ambient temperatures (installed)	in storage	-50 °C to + 70 °C
	during transport	-50 °C to + 70 °C
	in operation	-20 °C to + 55 °C
EMV specification	for industrial use according to EN 61000-6-2 und EN 61000-6-4	
Software class	class A	

Compatibility

MIC QKL mini 2	LON-Module	LONMARK Functional Profile
up to and including r17	IF 1.0	v1.0
r18	IF 2.0	v2.0
from r19	IF 3.0	v3.0

Attention:

Usage of a non-compatible LON-Module is not permitted, as this leads to malfunctions in the LON-functionality.

Note:

Further informations about the employed LON-Interface are contained in the related LONMARK Functional Profile:

„Refrigeration Controller MIC QKL mini with Defrost Controller Object, Evaporator Fan Controller Object and Thermostat Object“ v1.0, v2.0 or v3.0.” available under www.cool-expert.de

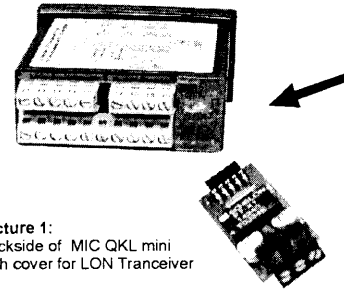
Assembling the LON Transceiver

Disconnect the device MIC QKL mini from the mains and secure it from switching on inadvertently.

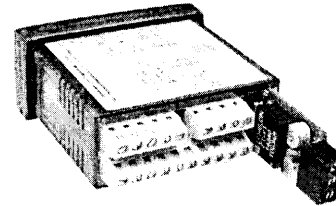
Remove the blue cover on the backside of MIC QKL mini, see **picture 1**.

Using the guideway, insert the MIC QKL mini LON Transceiver carefully as far as it will go, see **picture 2**.

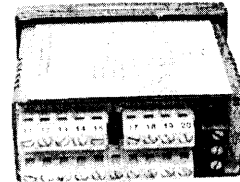
The MIC QKL mini LON Transceiver is inserted correctly, when the top side of it's connector is located 2 mm below the connectors of the controller MIC QKL mini, see **picture 3**.



Picture 1:
backside of MIC QKL mini
with cover for LON Transceiver



Picture 2:
MIC QKL mini with
LON Transceiver on the guideway



Picture 3:
backside of MIC QKL mini
with MIC QKLmini LON Transceiver installed