DAIKIN

2023
NEW

Control Systems

Connect with Daikin

Connect with Daikin

If you are a user or installer it is important you can **interact with our systems** in the easiest way, from **anywhere you are**. For any user our interfaces create **peace of mind** that their system is running in the best possible way.

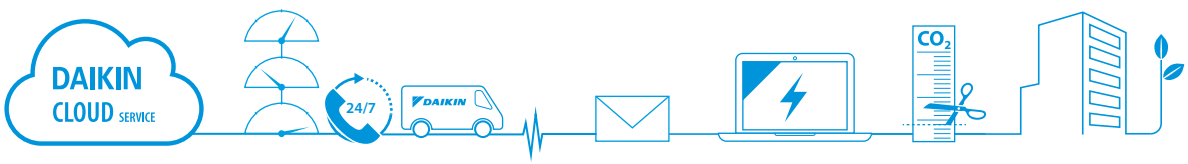
White Silver Black

Depending on the type of user and application Daikin develops controls and cloud services to ensure the best experience.

- For home owners it means **app and voice control** of their home comfort.
- For hotel owners it means easy and stylish **personal control for guests**, with an integration in hotel booking software for central control
- For technical managers it means **cloud access** to all sites, with the possibility to benchmark, optimize performance
- For installers it means **easy transfer of settings during commissioning**, remote retrieval of errors and preventive alerts to save time on maintenance or interventions

Our controls enable you to **connect with your customer**, save time, improve your comfort intelligently and reduce energy bills.

Remote monitoring



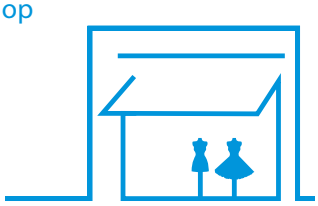
Control Systems

Control solutions summary

Daikin offers various control solution adapted to the requirements of even the most demanding commercial application.

› Basic control solutions for those customers with few requirements and limited budget
› Integrating control solutions for those customers that would like to integrate Daikin units into their existing BMS system
› Advanced control solutions for those customers that expect Daikin to deliver a mini BMS solution, including advance energy management

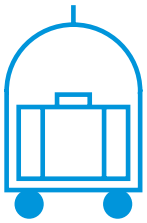
Shop



	Unit control			Integrating control			Advanced control	
								
	BRP069*	BRC1H52W/S/K	RTD-20	RTD-Net	KLIC DI V2	EKMBDXA	DCC601A51	DCM601B51
	Smartphone control for up to 50 indoor units	1 remote controller for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	Two additional probes can be connected	1 gateway for max. 64 indoor unit(s) (groups) & 10 outdoors	1 unit for 32 indoor unit(s) (5)	1 iTM for 64 indoor unit(s) (groups) (1)
Automatic control of A/C	●	●	●	●	●	●	●	●
Limit control possibilities for shop staff	●	●	●	●	●	●	●	●
Create zones within the shop			●				●	●
Interlock with eg. Alarm, PIR sensor			●				● (limited)	●
Integration into smart home systems	● (7)							
Integrate Daikin units into existing BMS via Modbus				●		●		
Integrate Daikin units into existing BMS via KNX					●			
Integrate Daikin units into existing BMS via HTTP								●
Monitor energy consumption	● (4)	● (4)					● (2)	●
Advanced energy management							● (2)	● (6)
Allows free cooling								●
Voice control	● (6)							
Integrate Daikin products cross pillars into Daikin BMS								●
Integrate third party products into Daikin BMS							●	●
Online control	●						● (2)	● (3)
Manage multiple sites							● (2)	● (3)

(1) 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) Via Daikin cloud service (3) Through own IT set-up (not Daikin cloud server) (4) Not available on all indoors (5) Up to 10 DCC601A51 can be combined as a single site on Daikin Cloud Service (6) Only for BRP069C51, connection to Google Assistant and Amazon Alexa; (7) only for BRP069C51, contact your local sales representative for an overview of available services.

Hotel



	Unit control	Integrating control		Advanced control	
					
	BRC1H52W/S/K	RTD-HO	KLIC DI V2	DCM010A51	DCM601B51
	1 remote controller for 1 indoor unit (group)	1 gateway for 1 indoor unit (group)	Two additional probes can be connected	1 interface for up to 2,500 indoor units	1 iTM for 64 indoor unit(s) (groups) (1)
Hotel guest can control & monitor basic functionalities from his room	●	●	● (3)		●
Limit control possibilities for hotel guests	●	●	●	●	●
Interlock with window contact	● (2)	●			●
Interlock with key-card	● (2)	●			●
Integrate Daikin units into existing BMS via Modbus		●			
Integrate Daikin units into existing BMS via KNX			●		
Integrate Daikin units into existing BMS via HTTP					●
Integrate Daikin unit control in hotel booking software				● Oracle Opera PMS	
Monitor energy consumption					●
Advanced energy management					●
Integrate Daikin products cross pillars into Daikin BMS					●
Integrate third party products into Daikin BMS					●
Online control					●

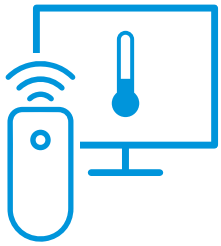
(1) 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) Via BRP7A51 adapter (3) requires KNX compatible controller

Office

	Unit control	Integrating control			Advanced control	
			 LonWorks Interface	 BACnet Interface	 intelligent Controller	 intelligent Manager
	BRC1H52W/S/K	EKMBDXB	DMS504B51	DMS502A51	DCC601A51	DCM601B51
	1 remote controller for 1 indoor unit (group)	1 gateway for max. 64 indoor unit(s) (groups) & 10 outdoors	1 gateway for 64 indoor unit(s) (groups)	1 gateway for 128 indoor unit(s) (groups), 20 out-doors (2)	1 unit for 32 indoor unit(s) (groups) (5)	1 iTM for 64 indoor unit(s) (groups) (1)
Automatic control of A/C	●	●	●	●	●	●
Centralised control for management		●	●	●	●	●
Local control for office staff	●				● (4)	● through Web Remote management
Limit control possibilities for office staff	●	●	●	●	●	●
Integrate Daikin units into existing BMS via Modbus		●				
Integrate Daikin units into existing BMS via HTTP						●
Integrate Daikin units into existing BMS via LonTalk			●			
Integrate Daikin units into existing BMS via BACnet				●		
Energy consumption read out	● (3)					
Monitor energy consumption					● (4)	●
Advanced energy management					● (4)	●
PPD software to distribute used kWh/indoor unit				● (6)		● (7)
Integrate Daikin cross pillar products into Daikin BMS						●
Integrate third party products into Daikin BMS					●	●
Online control					● (4)	●
Manage multiple sites					● (4)	● (5)

(1) 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) extension (DAM411B51) needed to have up to 256 indoor unit(s) (groups), 40 outdoors (3) Not available on all indoor units (4) Via Daikin cloud service (5) Through own IT set-up (not Daikin cloud sever) (5) Up to 10 DCC601A51 can be combined as a single site on Daikin Cloud Service (6) via DAM412B51 option (7) via DCM002A51 option

Infrastructure cooling



	Unit	Integrating	Advanced
			 intelligent Manager
	BRC1H52W/S/K	RTD-10	DCM601B51
	1 remote controller for 1 indoor unit (group) (2)	1 gateway for 1 indoor unit (group) Up to 8 gateways can be linked together	1 iTM for 64 indoor unit(s) (groups) (1)
Automatic control of A/C	●	●	●
Back-up operation	●	●	●
Duty rotation	●	●	●
Limit control possibilities in the technical cooling room	●	●	●
If room temperature above max., then show alarm & start standby unit.		●	●
If an error occurs, an alarm will be shown.	●	●	●
If an error occurs, activate an alarm output	Via KRP2/4A option (3)	●	Via WAGO I/O

(1) 7 iTM plus adapters (DCM601A52) can be added to have 512 indoor groups and 80 outdoor (systems) (2) Infrastructure cooling functions only compatible with indoor units connected to RZQG*/RZAG* outdoor units. (3) See option list of indoor unit

Onecta App

Now available with voice control

The Onecta App is for those who live their life on the go and who want to manage their Daikin system from their smartphone.

onecta

NEW

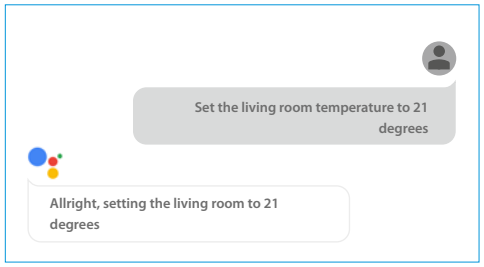
Voice control

To provide users with even more comfort and ease, the Onecta App now offers voice control. This hands-free feature cuts down on clicks to manage units faster than ever before.

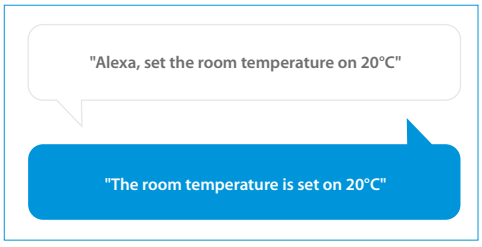
Cross-functional and multilingual, voice control pairs well with any smart device, including Google Assistant and Amazon Alexa.

works with the Google Assistant

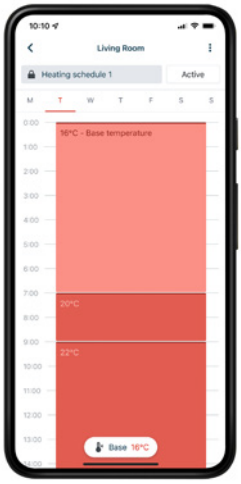
amazon alexa



Example of using the voice control via Google Assistant



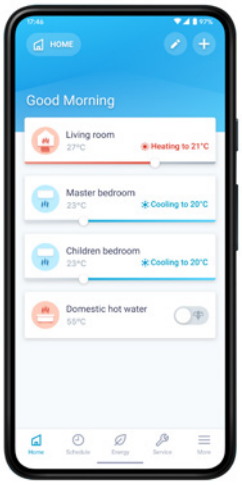
Example of using the voice control via Amazon Alexa



Schedule

Set up a programme outlining when the system should operate, and create up to six actions per day.

- ☑ Schedule room temperature and operation mode
- ☑ Enable holiday mode to save costs



Control

Customise the system to fit your lifestyle and year-round comfort levels.

- ☑ Change room and domestic hot water temperature
- ☑ Turn on powerful mode to boost hot water production

Monitor

Receive a thorough overview of how the system is performing and how much energy it consumes.

- ☑ Check the status of the heating system
- ☑ Access energy consumption graphs (day, week, month)

Function availability depends on the system type, configuration and operation mode.
The app functionality is only available if both the Daikin system and the app have a reliable internet connection.

Available on the App Store | GET IT ON Google Play

Scan the QR code to download the app now

Onecta connectable units

Integrated in unit
- FTXJ-AW/S/B
- FTXA-AW/BS/BT/BB
- C/FTXM-R
- FVXM-A(9)
- FTXP20-35N
- FTXTA-BW/BB
- FTXTM-R
- ATXM-R

BRP069B41
- FTXJ-MW/S *
- FTXP50-71N*

BRP069B42
- FTXZ-N
- FVXM-F

BRP069B45
- FTXP-M9
- ATXP-M
- FTXF-D/E
- FTXTP-M*
- ATXTP-M*
- ATXF-A/E
- FTXC-D
- ATXC-D

BRC069C81 **
Ceiling mounted
- FFA-A9

Concealed ceiling
- FDXM-F9
- FBA-A(9)
- FDA125A
- ADEA-A

Wall mounted
- FAA-B

Ceiling suspended
- FHA-A(9)
- FUA-A

Floor standing
- FVA-A
- FNA-A9

BRC069C82 **
Ceiling mounted
- FCAHG-H
- FCAG-B
- FDA200-250A

BRP069C51 ***
VRV 5 indoor units
- FXFA-A
- FXZA-A
- FXDA-A
- FXSA-A
- FXMA-A
- FXHA-A
- FXUA-A
- FXAA-A

* adapter included with the unit
** Wired remote controller must be connected to the indoor unit to operate online controller
*** Must be combined with BRC1H52W/S/K

Onecta app provides support to all units with a LAN or WLAN adapter

DCS residential

Remote monitoring and servicing

DCS Residential

From the professional portal, installers can activate the remote monitoring allowing them to supervise your installation on multiple parameters, from their location. They will get an automatic notification in case there is something wrong with the installation. By changing certain settings, they can improve your comfort immediately. Save time and get a better support, thanks to these new features.

How to access?

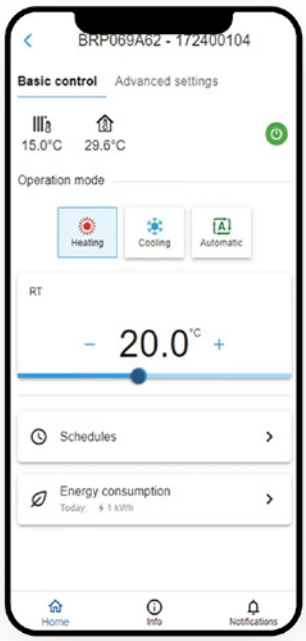
Through the e-care app and SBM Pro portal.

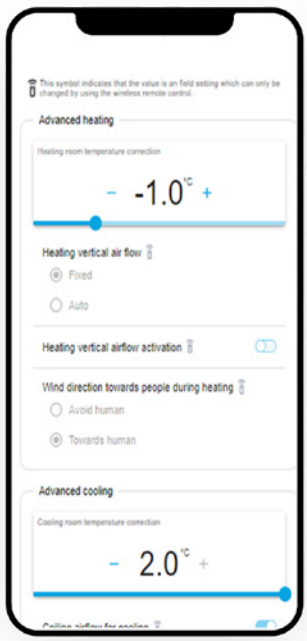
What to expect

Remote monitoring and servicing of split products, after consent from the end user.

- Control your customer's unit and change settings.
- Read out temperature, energy consumption and error codes.

	Description	DCS lite
CONTROL	Unit on/off	•
	Operation mode	•
	Temperature set point	•
	Fan speed	•
	Econo mode	•
	Schedules	•
	Flash streamer	•
	Powerful mode	•
	Comfort	•
	Horizontal swing	•
	Vertical swing	•
	Demand control	•
	Holiday mode	•
INFO	Indoor temperature	•
	Outdoor temperature	•
	Energy consumption	•
	Error state & code	•
	Adapter model number	•
	Adapter serial number	•





Madoka wired remote controller

Madoka

The beauty of simplicity.

Silver
RAL 9006 (metallic)
BRC1H52S

Black
RAL 9005 (matte)
BRC1H52K

White
RAL9003 (glossy)
BRC1H52W

User-friendly wired remote controller with premium design

Madoka combines refinement and simplicity

- Sleek and elegant design
- Intuitive touch-button control
- Three display options: standard, detailed and **new symbolic view**
- Three colours to match any interior
- Compact, measures only 85 x 85 mm
- Advanced settings **copy function** and commissioning via smartphone

NEW › CO_2 concentration visualisation

reddot award 2018
winner

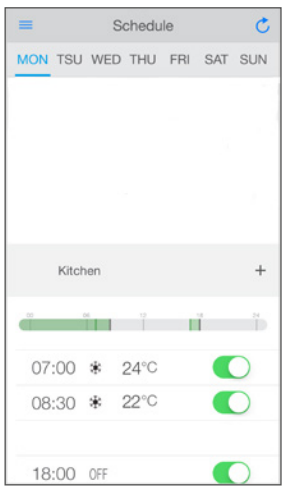
DESIGN AWARD 2018

Madoka Assistant

Simplifies the advanced settings such as schedule or set point limitation

- ☑ Visual interface simplifies advanced settings such as schedule setting, energy saving activation, setting restrictions, etc.
- ☑ Save field settings and schedules on your phone and upload to multiple controllers, saving time and cost
- ☑ Easy and quick commissioning
- ☑ Featuring Bluetooth® low energy technology

Easy setting of schedules

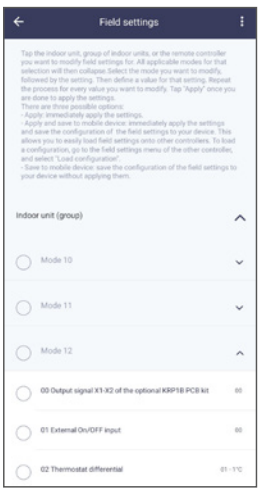


Advanced user settings

NEW

Bluetooth strength indication

Field settings



BRC1H52W / BRC1H52S / BRC1H52K

Madoka wired remote controller for Sky Air and VRV

BRC1H52W
Symbollic view

BRC1H52S
Standard view

BRC1H52K
CO_2 visualisation

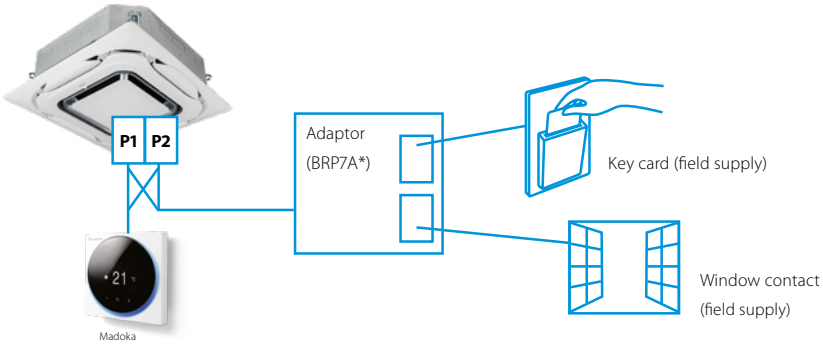
A complete redesigned controller focussed to enhance user experience

› Sleek and elegant design
› Intuitive touch-button control
› Three display options: standard, detailed and **new symbolic view**
› Direct access to basic functions
(on/off, set point, mode, target values, fan speed, louvres, filter icon & reset, error & code)
› Three colours to match any interior
› Compact, measures only 85 x 85 mm
› Real time clock with auto update to daylight saving time

Hotel application features

› Energy saving through key card, window contact integration and set point limitation (BRP7A*)
› Flexible setback function ensures room temperature remains within comfortable limits to ensure guest comfort

Key card and window contact integration



Madoka Assistant: Advanced settings can be easily done via your smartphone

A range of energy-saving functions that can be selected individually

› Temperature range restriction:
Save on energy by setting the low temperature limit in cooling mode and the high temperature limit in heating mode (1)
› Setback function
› Adjustable presence detector and floor sensor (available on the Round Flow and Fully Flat Cassettes)
› Automatic temperature reset
› Auto off timer

Kilowatt-hour consumption tracking (2)

The kWh indicator displays indicative power consumption for the last day/month/year.

Other functions

› NEW Three user access levels: Basic user, Advanced and Installer to match user requirements and prevent improper use.
› Save field settings and schedules on your phone and upload to multiple controllers, saving time and cost
› NEW Mark frequently used menu's as favourites for direct access
› Up to three independent schedules can be programmed, allowing you to switch easily between them throughout the year (e.g. summer/winter/mid-season)
› Menu settings can be individually locked or restricted
› The outdoor unit can be set to quiet mode and power consumption limit control by schedule (3)
› Real-time clock that updates automatically for daylight saving

DUTY ROTATION

Cost-effective solution for infrastructure cooling applications

› Only in combination with RZAG* / RZQG*
› Duty rotation

After a certain period of time, the operating unit will go into standby and the standby unit will take over, extending the system lifetime. Rotation interval can be set for 6, 12, 24, 72 or 96 hours, as well as weekly.

› Back-up operation: if one unit fails, the other unit will start automatically

(1) Also available in auto cooling/heating changeover mode
(2) For Sky Air FBA, FCAG and FCAHG pair combinations only
(3) Only available on RZAG*, RZASG*, RZQG*, RZQSG*

BRC1HHDW / BRC1HHDS / BRC1HHDK

Madoka wired remote controller for Daikin Altherma 3 heat pumps

BRC1HHDW

BRC1HHDS

BRC1HHDK

A new generation of user interface, redesigned and intuitive

Intuitive control with a premium design:

The smooth curves of the Madoka controller offer a sleek, refined shape which is distinguished by its striking blue circular display. Presenting a clear visual reference with large easy to read numbers, the controller features are accessed through three touch buttons, which combine intuitive control with easy adjustability for an enhanced user experience.

Three colours to match any interior design:

No matter your interior design, Madoka will match it. Silver gives an additional touch to stand out in any interior or application, while Black is an ideal match for darker, stylish interiors. White offers a sleek, modern look.

Easily set operation parameters:

Setting and finetuning your controller is simple and helps you attain higher energy savings and more comfort. The system enables you to select the space operation mode (heating, cooling or automatic), set the desired room teperature and control the domestic hot water temperature.

Easy Update via Bluetooth:

It is strongly recommended that the user interface has the latest software version. To update the software or check if updates are available, you need a mobile device and the Madoka Assistant app. This app is available from Google Play and the Apple Store.

GET IT ON Google Play

Available on the App Store

www.daikin.eu/madoka

EKRUCB*

Wired remote control for Heating

Control

› Manage space heating, cooling, domestic hot water and among others, booster mode
› User-friendly remote control with contemporary design
› Easy to use with direct accessibility to all main functions

Comfort

› An additional user interface can include a room thermostat in the space to be heated
› Easy commissioning: intuitive interface for advanced menu settings

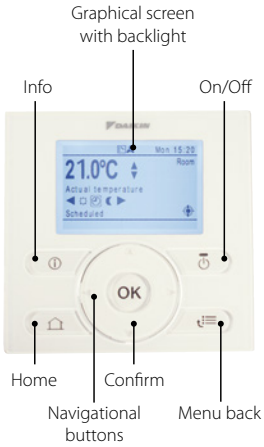
* only in combination with EKRTETS

General features

Several languages possible depending on the model, including: English, German, Dutch, Spanish, Italian, French, Greek, Russian, etc.

Applicable Daikin units

› Daikin Altherma R (F/W)
  - Daikin Altherma M
› Daikin Altherma R Hybrid
› Daikin Altherma GEO
› Domestic hot water heat pump



EKRUAHTB

System controller for Daikin Altherma

Control

Reduce installation time

› Program all settings for an installation on a laptop computer and simply upload them to the controller during commissioning
› Reuse similar settings for related installations

Improve service diagnostics and maintenance

› The controller records the time, date and nature of the last 20 error occurrences

Comfort

Maximise comfort with stable room temperatures

› Raise or lower water temperature as a function of the actual room temperature
› Manage energy consumption
› Intuitive screen displays the output and input energy of the unit provide consumption transparency

General features

Weather depending floating set point

When the floating set point function is enabled, the set point for the leaving water temperature will be dependent on the outside ambient air temperature. At low outside ambient air temperatures, the leaving water temperature will increase to satisfy the rising heat requirement of the building. At warmer temperatures, the leaving water temperature will decrease to save energy.

Applicable Daikin units

› Daikin Altherma R HT
› Daikin Altherma R Flex Type HT

Applicable Daikin units





			BRC1HHDW/S/K	EKRUCB*	EKRUHML*	EKRUAHTB	DOTROOMTHEAA
Daikin Altherma 3 H HT (F/W)	14-16-18 kW	EPRA14-18D7 + ETV/B*-E7	•				
Daikin Altherma 3 H HT ECH2O	14-16-18 kW	EPRA14-18E + ETS*-E7	•				
Daikin Altherma 3 H MT (F/W)	8-10-12 kW	EPRA08-12E + ETV/B*-E	•				
Daikin Altherma 3 H MT (ECH2O)	8-10-12 kW	EPRA08-12E + ETS*-E	•				
Daikin Altherma 3 R (F/W)	4-6-8kW	ERGA-E* + EHV/B*-E	•				
Daikin Altherma 3 R ECH2O	4-6-8kW	ERGA-E* + EHS*-E	•				
Daikin Altherma 3 R (F/W)	11-14-16 kW	ERLA-D* + EBV/B*-D	•				
Daikin Altherma 3 R ECH2O	11-14-16 kW	ERLA-D* + EBS*-D	•				
Daikin Altherma R HT	11-14-16 kW	EKHBRD-ADV/Y17 + ER(R/S)Q-AV/Y1				•	
Daikin Altherma 3 M	4-6-8-9-11-14-16 kW	E(B/D)LA-E/D*	•				
Daikin Altherma R Hybrid	5-8 kW	EVLQ-CV3		•			
Daikin Altherma H Hybrid	4 kW	EJHA-AV3			•		
Daikin Altherma 3 GEO	6-10 kW	EGSA(H/X)-D9W	•				
Daikin Altherma 3 C Gas W	12-35 kW	D2CND-A1A/A4A					•

Individual room control system for temperature adjustment of heating and cooling systems

General features

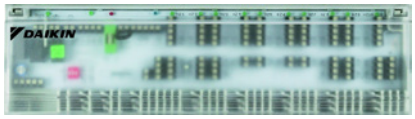
› Improve energy efficiency of the home
› Universally deployable and scalable
› Easy and intuitive installation, operation and maintenance
› Cost effective and convenient for the end-user

Comfort

With the help of an electronic room-by-room control system, users can regulate the temperature individually in each room.

In addition to the warmth output of the actual heating surfaces, the room temperature control system also takes all other heat sources into account, such as sunshine, warmth from lights or people, and other sources of warmth, such as a fireplace or a tiled stove. On the basis of a continuous comparison of the target and current temperatures, the room temperature control system opens and closes the individual heating circuits by way of electrical valve actuators.

System components



Base station
EKWUFHTA1V3
The Daikin Wired Base Station is the central connection unit of a room-by-room temperature control for the surface temperature adjustment of heating and cooling systems.

Wired digital thermostat
EKWCTRDI1V3
The setting of the desired room temperature and the operation, can be performed comfortably via a rotary control with rotary-push action and soft ratchet. The well-structured and language-neutral symbols of the display always clearly indicate all settings.

Wired analog thermostat
EKWCTRAN1V3
An optimum price-performance ratio is offered for rooms where only a very good temperature control is desired, without the comfort function of the display variant.

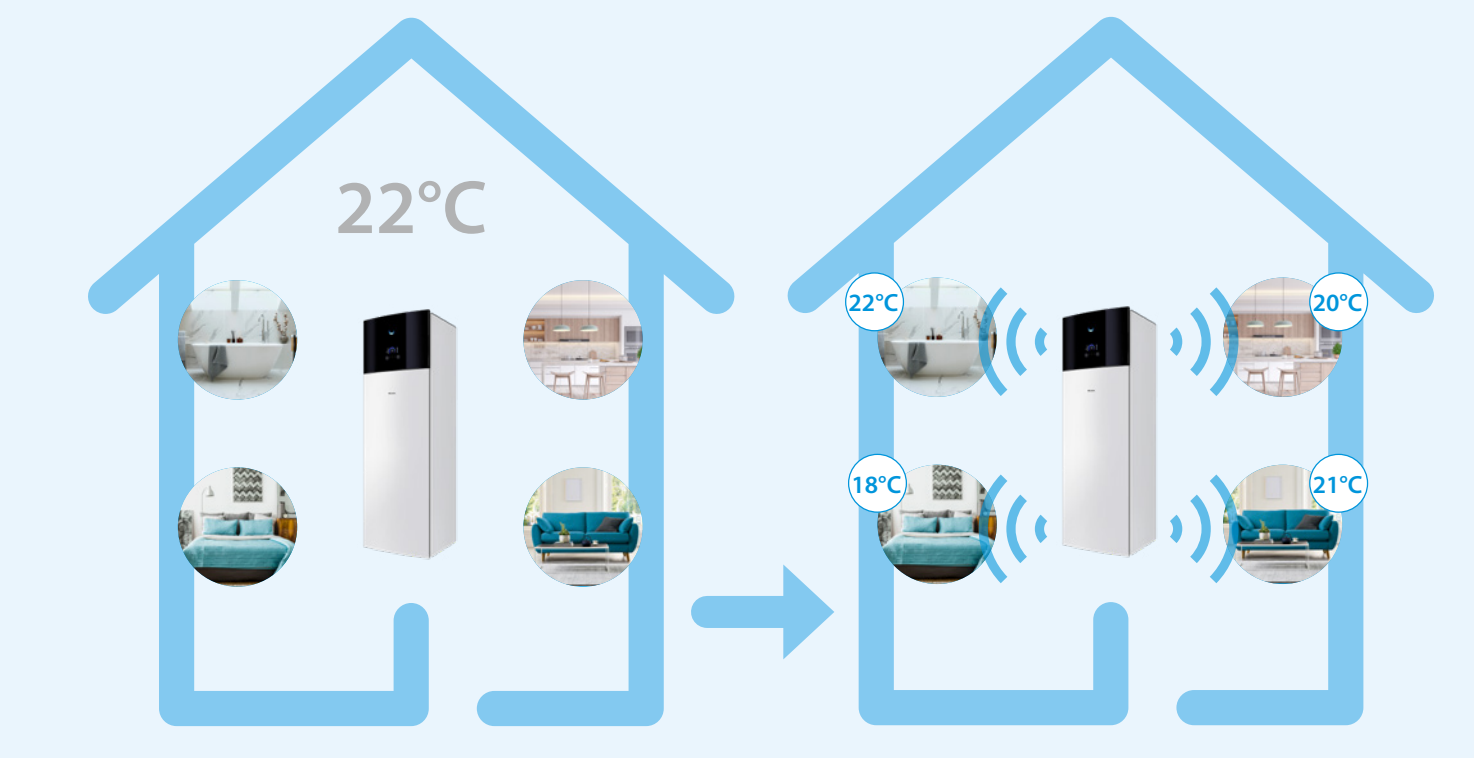
Valve actuator
EKWCVATR1V3
The Daikin Valve Actuator is a thermoelectric valve drive for opening and closing valves on heating circuit distributors of concealed heating and cooling systems.

Applicable Daikin units

› Combinable to all Daikin Altherma units

Individual wireless room controllers

Our individual wireless room controllers allow for a total flexibility in heating your home.



Make energy savings

A traditional heating system makes you manage one temperature for your entire home. In most cases, you will be heating empty rooms, making you waste energy.

To avoid heating empty rooms, the alternative is to shut them off manually.

Wireless control for a better flexbility

Get rid of cables and interconnect all your devices thanks to the cloud.

Our wireless range of controllers makes your life easier. As soon as they are installed, you can combine them in Onecta app.

You can then control them directly from the device itself, or from the Onecta app.

BRC1E53A

User friendly remote control for Sky Air and VRV

Graphical display of indicative electricity consumption (Function available in combination with FBA-A, FCAG and FCAHG)

A series of energy saving functions that can be individually selected

- Demand control (1)
- Temperature range limit
- Setback function
- Presence & floor sensor connection (available on round flow and fully flat cassette)
- kWh indication (2)
- Set temperature auto reset
- Off timer

Cost-effective solution for infrastructure cooling applications
> Only in combination with RZAG* / RZQG*

Other functions

- Up to 3 independent schedules
- Possibility to individually restrict menu functions
- Choice of display between symbol or text
- Real time clock with auto update to daylight saving time
- Built-in backup power for clock (up to 48 hours). Settings are always kept in case of power loss.
- Supports multiple languages: BRC1E53A: English, German, French, Dutch, Spanish, Italian, Portuguese

(1) Only available on RZAG*, RZASG*, RZQG*, RZQSG* I (2) For Sky Air FBA, FCAG and FCAHG pair combinations only

BRC1D52

Wired remote control for Sky Air and VRV

BRC1D52

- Schedule timer: Five day actions can be set
- Home leave (frost protection): during absence, the indoor temperature can be maintained at a certain level. This function can also switch the unit ON/OFF
- User friendly HRV function, thanks to the introduction of a button for ventilation mode and fan speed
- Immediate display of fault location and condition
- Reduction of maintenance time and costs

ARC4*/BRC4*/BRC7*

Infrared remote control

ARC466A1

BRC4*/BRC7*

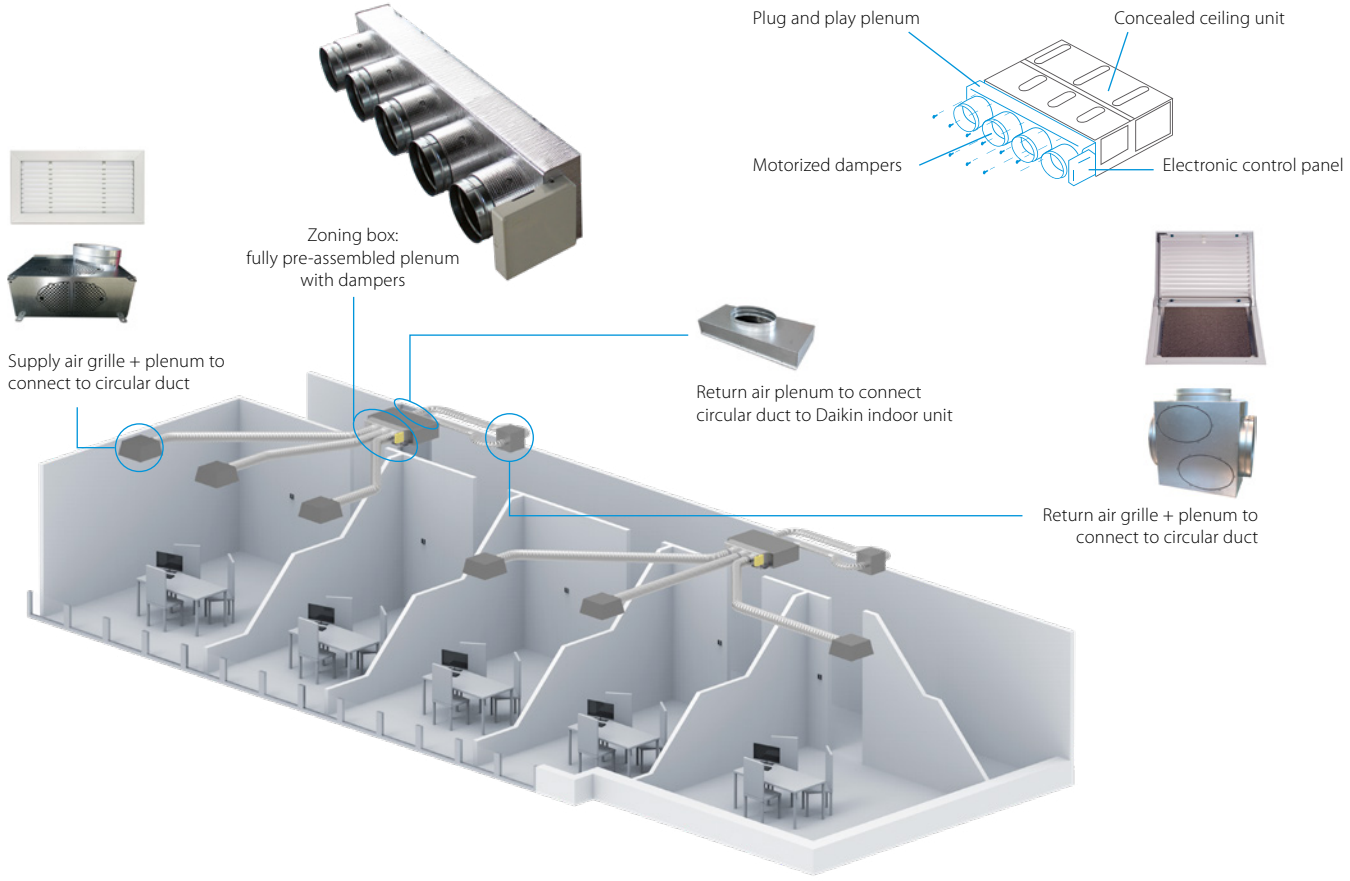
Operation buttons: ON / OFF, timer mode start / stop, timer mode on / off, programme time, temperature setting, air flow direction (1), operating mode, fan speed control, filter sign reset (2), inspection (2)/ test indication (2)
Display: Operating mode, battery change, set temperature, air flow direction (1), programmed time, fan speed, inspection / test operation (2)

1. Not applicable for FXDQ, FXSQ, FXNQ, FBDQ, FDXM, FBA
2. For FX** units only
3. For all features of the remote control, refer to the operation manual

Multi-zone controller

The multi-zoning system is a room-by-room controller. It is fitted with motorised dampers, which immediately adapt using Daikin ducted solutions. This system supports control of up to 8 zones connected to one indoor unit via a centralised thermostat located in the main room and individual thermostats for each of the zones.

Easy selection via our NEW software!



Compatibility

Number of motorised dampers		Reference	Dimensions H x W x D (mm)	Ø (mm)	SkyAir FDXM-F9 25	35	50	60	SkyAir FBA-A(9) 35	50	60	71	100	125	140	SkyAir ADEA-A 71	100	125	VRV IV+ FXDQ-A3 15	20	25	32	40	50	63	VRV IV+ FXSQ-A 15	20	25	32	40	50	63	80	100	125	140
Standard plenum																																			
	2	AZE(Z/R)6DAIST07XS2	300 x 930 x 454	200																					•	•	•	•							
		AZE(Z/R)6DAIST07S2							•	•																			•	•					
	3	AZE(Z/R)6DAIST07XS3																									•	•	•	•					
		AZE(Z/R)6DAIST07S3							•	•																			•	•					
	4	AZE(Z/R)6DAIST07S4	300 x 1,140 x 454						•	•																			•	•					
		AZE(Z/R)6DAIST07M4									•	•				•															•	•			
	5	AZE(Z/R)6DAIST07M5	300 x 1,425 x 454								•	•				•															•	•			
		AZE(Z/R)6DAIST07L5											•	•	•		•	•															•	•	
	6	AZE(Z/R)6DAIST07M6	300 x 1,638 x 454								•	•				•															•	•			
		AZE(Z/R)6DAIST07L6											•	•	•		•	•															•	•	
	7	AZE(Z/R)6DAIST07L7	515 x 1,425 x 454										•	•	•		•	•															•	•	
		AZE(Z/R)6DAIST07XL7																																	•
	8	AZE(Z/R)6DAIST07L8											•	•	•		•	•															•	•	
		AZE(Z/R)6DAIST07XL8																																	•
Medium plenum																																			
	2	AZEZ6DAIBS07XS2	250 x 930 x 454	200																					•	•	•	•							
		AZEZ6DAIBS07S2							•	•																			•	•					
	3	AZEZ6DAIBS07XS3																									•	•	•	•					
		AZEZ6DAIBS07S3							•	•																			•	•					
		AZEZ6DAIBS07M3									•	•				•															•	•			
	4	AZEZ6DAIBS07S4	250 x 1,140 x 454						•	•																			•	•					
		AZEZ6DAIBS07M4									•	•				•															•	•			
		AZEZ6DAIBS07L4											•	•	•		•	•															•	•	
	5	AZEZ6DAIBS07S5	250 x 1,425 x 454						•	•																			•	•					
		AZEZ6DAIBS07M5									•	•				•															•	•			
		AZEZ6DAIBS07L5											•	•	•		•	•															•	•	
		AZEZ6DAIBS07XL5																																	•
	6	AZEZ6DAIBS07M6	250 x 1,638 x 454								•	•				•															•	•			
		AZEZ6DAIBS07L6											•	•	•		•	•															•	•	
		AZEZ6DAIBS07XL6																																	•
Slim plenum	2	AZE(Z/R)6DAISL01S2	210 x 720 x 444	200	•	•													•	•	•	•													
	3	AZE(Z/R)6DAISL01S3			•	•													•	•	•	•													
	4	AZE(Z/R)6DAISL01M4	210 x 930 x 444																				•	•											
	5	AZE(Z/R)6DAISL01L5	210 x 1,140 x 444				•	•																	•										

(1) Z models are reversible; R models are heating only
(2) Medium Ceiling Void reversible units can be blocked to heating only via AZX6MCS module

Controls

3 controller versions are available to choose from: Colour, touch or simplified

AZCE6BLUEZEROCB (Wired)

Bluezero - main thermostat
› Intuitive graphical, colour touch screen for controlling multiple zones

AZCE6THINKRB (Wireless)

Think - zone thermostat
› Graphic touch button with low-energy e-ink screen for controlling single zones


AZCE6LITECB (Wired)
AZCE6LITERB (Wireless)

Lite - zone thermostat
› Simplified thermostat with touch buttons for temperature control

› Optional bus cable (2 x 0.5 mm² | 2 x 0.22 mm²), 15 m length: AZX6CABLEBUS15, 100m length: AZX6CABLEBUS100


AZX6WSPHUB


AZX6WSC5GER

Webserver for remote control
› Cloud based remote control of multizoning kit(s)
› Configuration and control of zones (temperature, operation mode, ...)
› Access via webportal, or Android/IOS application
› Supports Ethernet and WIFI
› AZX6WSPHUB:
  › For installation on DIN rail
  › 32 zoning boxes can be controlled
› AZX6WSC5GER:
  › For installation in the unit
  › Controls one zoning box


AZX6WSPBAC


AZX6KNXGTWAY

BACnet or KNX gateway
› Allows ON/OFF control of each zone
› Control of temperature for each zone
› Status indication of operation mode
› One gateway needed per system

Grilles and plenums

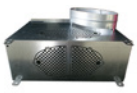
Supply air grilles and plenums


RDHV040015BKX

Wall type supply grille
› With horizontal and vertical adjustable flaps


RLQV040015BKX

Ceiling type supply grille
› With horizontal flaps angled at 15°
› Vertical flaps can be adjusted manually


PREJ0400150T

Plenum for supply grille
› To connect circular ducts to discharge grille
› Insulated, galvanised steel
› Diameter 250mm

Return air grilles and plenums


RRFR050050BTX

Return air grille with integrated filter
› Filters particles from the air


BR500

Plenum for return grille
› To connect 1 up to 4 circular ducts to the return air grille
› Diameter 250mm


AZCEZDAPR07*

Plenum for return air
› To connect 1 up to 4 circular ducts to the Daikin concealed ceiling units
› Diameter 250mm
› Different sizes (XS, S, M, L, XL) to fit the indoor unit

Daikin mAP

Digital interface for your HVAC equipment

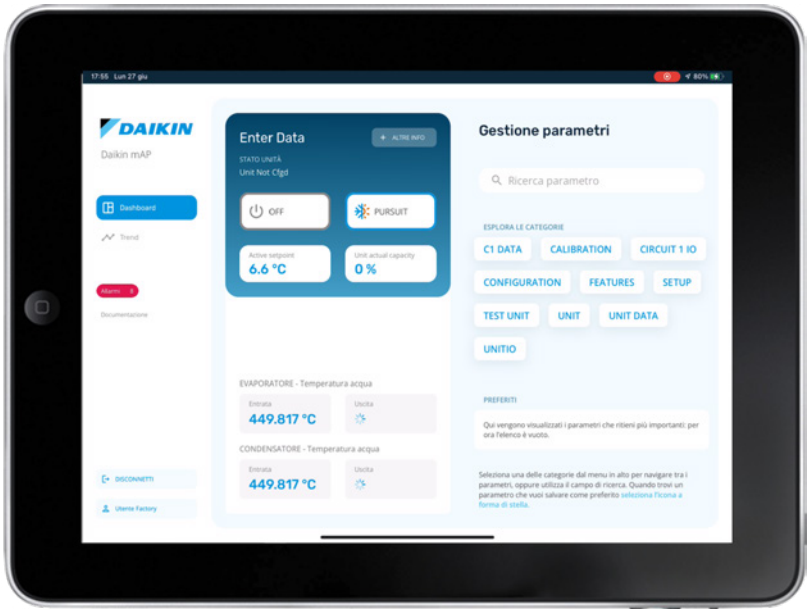
The Daikin mAP is the brand-new Digital HMI solution for all Daikin Applied products, designed to let end-users and technician operate easily and effectively from their smartphone or tablet while performing field activities.

Daikin mAP

NEW

Digital Interface

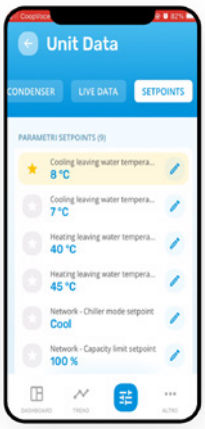
The Daikin mAP is the brand-new Digital HMI solution for all Daikin Applied products, designed to let end-users and technician operate easily and effectively from their smartphone or tablet while performing field activities.



Control

Change settings and control parameters with more flexibility.

- ☑ Up to 4 user levels with different privileges
- ☑ Improved unit access security



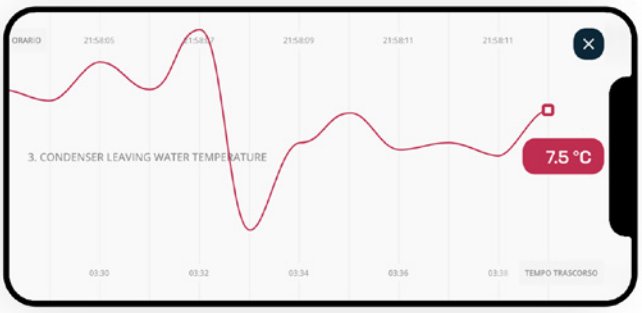
Select

Explore and search for a specific unit parameter.

- ☑ Search bar to easily find the desired parameter
- ☑ Select & change and pin in the dashboard your preferred parameters

Monitor

Start a live monitoring and trending of your preferred parameters



- ☑ Background monitoring for a non-stop operations
- ☑ Export and share monitoring data in .CSV file
- ☑ Up to 20 live trends and monitoring

Centralised remote controller

Centralised control of the Sky Air and VRV system can be achieved via 2 user friendly compact remote controllers. These controls may be used independently or in combination with:
1 group = several (up to 16) indoor units in combination
1 zone = several groups in combination.
A centralised remote control is ideal for use in tenanted commercial buildings subject to random occupation, enabling indoor units to be classified in groups per tenant (zoning).

DCS302C51

Centralised remote control

Providing individual control of 64 groups (zones) of indoor units.

- a maximum of 64 groups (128 indoor units, max. 10 outdoor units) can be controlled
- a maximum of 128 groups (128 indoor units, max. 10 outdoor units) can be controlled via 2 centralised remote controls in separate locations
- zone control
- group control
- malfunction code display
- maximum wiring length of 1,000m (total: 2,000m)
- air flow direction and air flow rate of HRV can be controlled
- expanded timer function

DCS301B51

Unified ON/OFF control

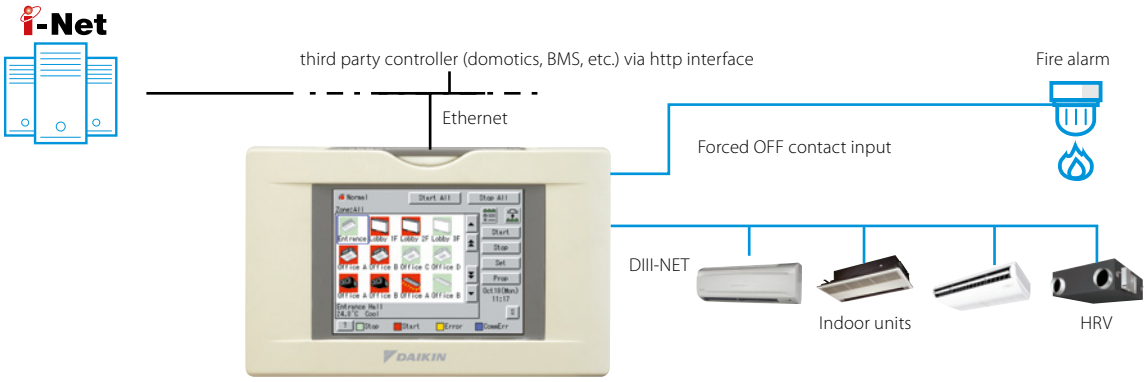
Providing simultaneous and individual control of 16 groups of indoor units.

- a maximum of 16 groups (128 indoor units) can be controlled
- 2 remote controls in separate locations can be used
- operating status indication (normal operation, alarm)
- centralised control indication
- maximum wiring length of 1,000m (total: 2,000m)

DCS601C51

intelligent touch Controller

Detailed & easy monitoring and operation of VRV systems (max. 64 indoor units groups).



DCS601C51

Languages
- English
- French
- German
- Italian
- Spanish
- Dutch
- Portuguese

System layout
- Up to 64 indoor units can be controlled
- Touch panel (full colour LCD via icon display)

Control
- Individual control (set point, start/stop, fan speed) (max. 64 groups/indoor units)
- Set back shedule
- Enhanced scheduling function (8 schedules, 17 patterns)
- Flexible grouping in zones
- Yearly schedule
- Fire emergency stop control
- Interlocking control
- Increased HRV monitoring and control function
- Automatic cooling / heating change-over
- Heating optimization
- Temperature limit
- Password security: 3 levels (general, administration & service)
- Quick selection and full control
- Simple navigation

Monitoring
- Visualisation via Graphical User Interface (GUI)
- Icon colour display change function
- Indoor units operation mode
- Indication filter replacement

Cost performance
- Free cooling function
- Labour saving
- Easy installation
- Compact design: limited installation space
- Overall energy saving

Open interface
- Communication to any third party controller (domotics, BMS, etc.) is possible via open interface (http option DCS007A51)

Connectable to
- VRV
- HRV
- Sky Air
- Split (via interface adapter)

DCC601A51

intelligent Tablet Controller

Advanced centralised controller with Cloud connection

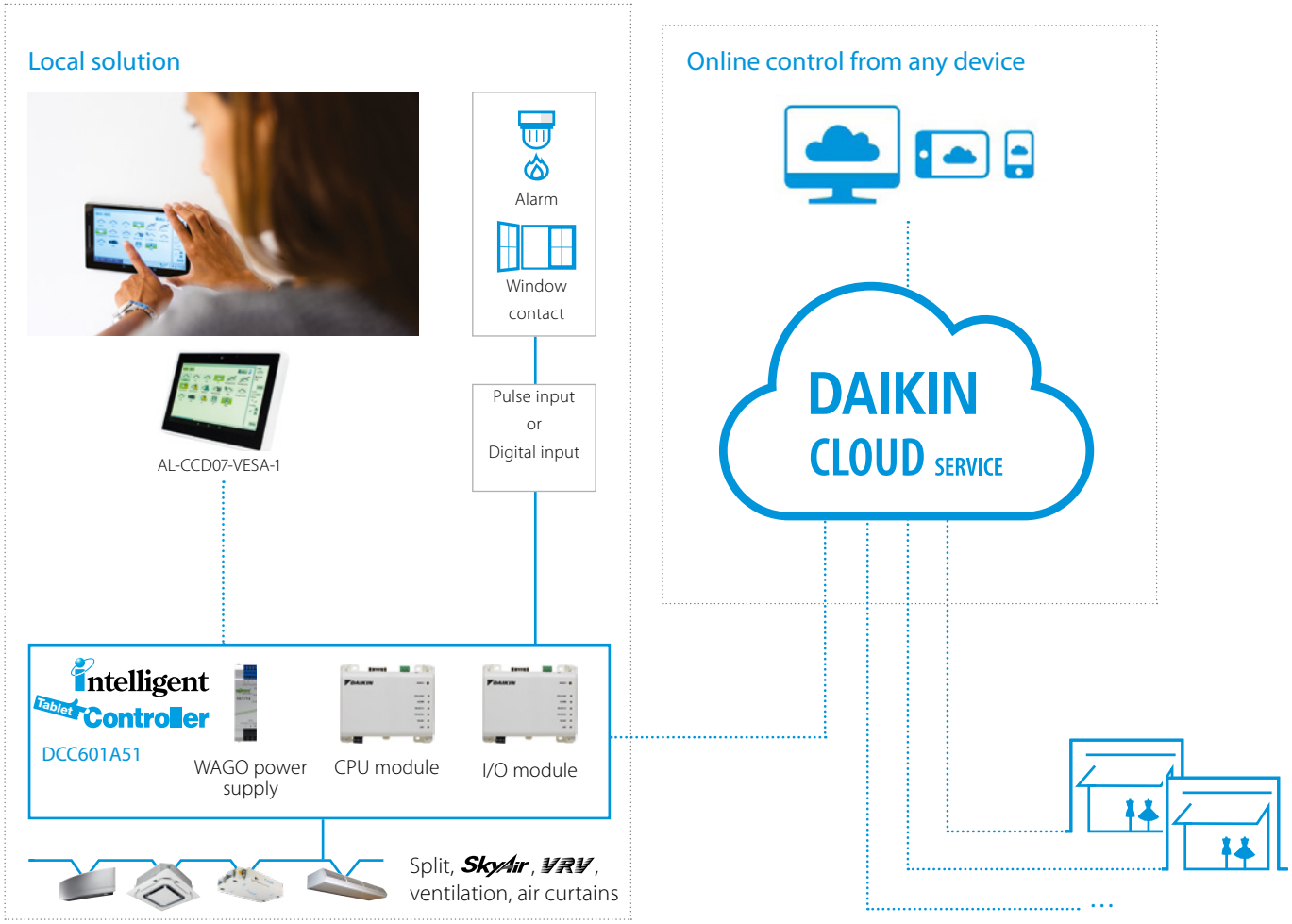
- Intuitive and user-friendly interface
- Flexible concept for stand alone and multi site applications
- Total solution thanks to integration of 3rd party equipment
- Monitor & control your small commercial building, no matter where you are

2 solutions:

Local solution
› Offline centralised control
› Stylish optional screen fits any interior

Cloud solution
› Flexible online control from any device (Laptop, tablet...)
› Monitor & control one or multiple sites
› Benchmark the energy consumption of different installations (1)
› Energy consumption follow-up to comply with local regulations

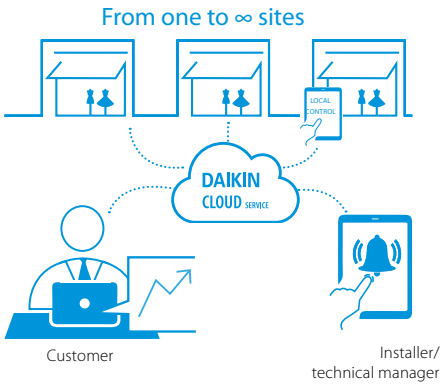
System layout



(1) For VRV and Sky Air R-32 ranges the consumption data is integrated; for other (HVAC) systems, field supplied kWh meters will be required

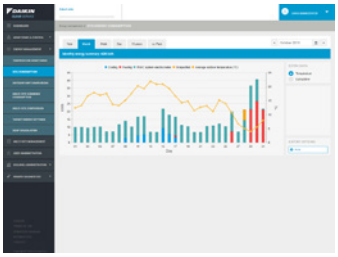
Total solution

› Total solution thanks to a large integration of Daikin products and 3rd party equipment
› Connect a wide range of units (Split, Sky Air, VRV, Ventilation, Biddle air curtains)
› Simply control your entire building centrally
› Increased customer shopping experience by better management of your shop comfort level



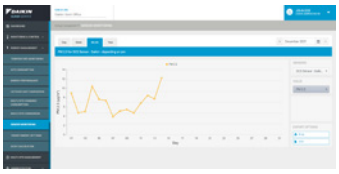
Daikin Cloud Services

› Control your building no matter where you are
› Monitor and control multiple sites
› Installer or technical manager can remotely login to the cloud for first trouble-shooting
› Benchmark the energy consumption of different installations (1)
› Manage & track your energy use


Energy management and consumption follow up

User friendly touch control

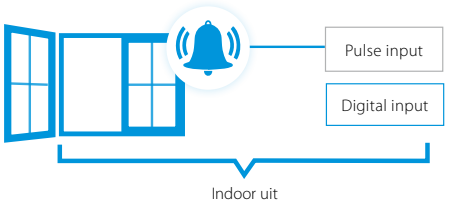
› Stylish Daikin supplied optional screen for local control fits any interior
› Intuitive and user-friendly interface
› Full solution with simple control
› Easy commissioning


NEW
IAQ Visualisation (Indoor Air Quality monitoring)

Flexible

› Pulse/digital inputs for 3rd party equipment such as kWh meters, emergency input, window contact, …
› Modular concept allows your cloud to grow with your business
› Control up to 32 indoor units per controller and 320 units per site

(1) only available in combination with certain indoor units



Functions overview

		Local solution	Cloud solution
Languages		Depends on local device	EN, DE, FR, NL, ES, IT, EL, PT, RU, TR, DA, SV, NO, FI, CS, HR, HU, PL, RO, SL, BG, SK
System layout	N° of connectable indoor units	32	32
	Multiple sites control		●
Monitoring & control	Basic control functions (ON/OFF, mode, filter sign, setpoint, fan speed, ventilation mode, room temperature, …)	●	●
	Remote control prohibition	●	●
	All devices ON/OFF	●	●
	Zone control		●
	Group control	●	●
	Weekly schedule	●	●
	Yearly schedule		●
	Interlock control	●	●
	Set point limitation		●
	Visualisation of energy use per operation mode		●
Connectable to	DX split, Sky Air, VRV	●	●
	Modular L Smart, VAM, VKM ventilation	●	●
	Air curtains	●	●

For available Daikin Cloud Service options refer to the option list

intelligent touch Manager

Mini BMS

with full integration across all product pillars

DCM601B51

intelligent touch Manager

- Price competitive mini BMS
- Cross-pillar integration of Daikin products
- Integration of third party equipment

Download the WAGO selection tool from my.daikin.eu

› Easy selection of WAGO materials
› Material list creation
› Time saving
  - Includes wiring schemes
  - Contains commissioning/preset data for iTM

Check on YouTube

https://www.youtube.com/DaikinEurope

System overview

Web Access

DAIKIN CLOUD SERVICE

To connect intelligent Touch Manager to the Daikin Cloud Service, the IoT gateway (EU. SB.5000072) and AC/DC converter (999175A) is needed.

Internet
Extranet
LAN
3G
HTTP interface

Integration of third party equipment

Fire alarm

kWh meter

Di/Pi line
Max. 200m

intelligent touch Manager

DCM601B51

BACnet/IP protocol

WAGO interface

Analog/digital/pulse objects

Lighting

Fan

Pump

Sensor

I/O module

I/O module

Multi state objects

Elevator

Air handling unit

Alarm

DALI
Protocol

Lighting

Sensor

Full control of Daikin HVAC-R portfolio

DIII Plus adaptor DGE601A52

DIII Plus adaptor Slot DGE601A53
Max. 6 Additional Slots can be connected

Max 64 indoor units

Direct plug & play connection!

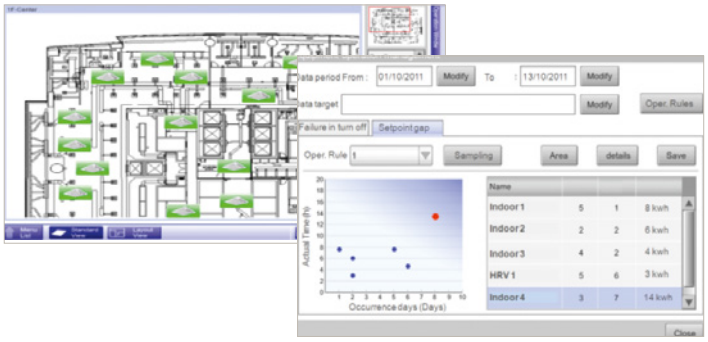
Split
Sky Air
VRV
indoor units, air curtain, hydrobox, air handling units

KRP928* adaptor

Fan coil units

Chillers and AHU

touch intelligent Manager



User friendliness

› Intuitive user interface
› Visual lay out view and direct access to indoor unit main functions
› All functions direct accessible via touch screen or via web interface
› Simplified electrical wiring, only one power supply & one connection wiring required

Smart energy management

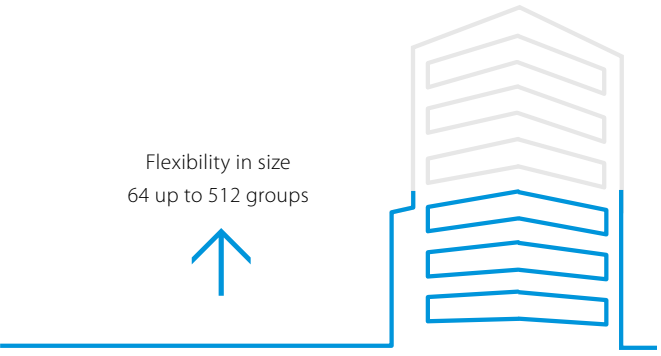
› Monitoring if energy use is according to plan
› Helps to detect origins of energy waste
› Powerful schedules guarantee correct operation throughout the year
› Save energy by interlocking A/C operation with other equipment such as heating
› Peak Power Cut off Control: Activating this feature in schedule function allows users to operate the outdoor unit in 4 settings i.e. 100%,70%, 40% and 0%

Flexibility

› Cross-pillar integration (heating, air conditioning, applied systems, refrigeration, air handling units)
› BACnet protocol for 3rd party products integration
› I/O for integration of equipment such as lights, pumps… on WAGO modules
› Modular concept for small to large applications
› Control up to 512 indoor unit groups via one ITM and combine multiple ITM via web interface

Easy servicing and commissioning

› Remote refrigerant containment check reducing on site visit
› Simplified troubleshooting
› Save time on commissioning thanks to the pre-commissioning tool
› Auto registration of indoor units



Plug & play


Split

SkyAir

VRV

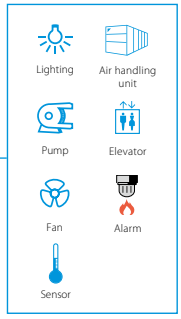

Fan coils


Chillers and AHU

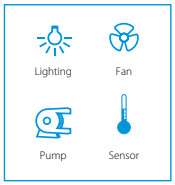

HRV ventilation

BACnet/IP protocol

DALI Protocol



WAGO I/O



Functions overview

Languages
- English
- French
- German
- Italian
- Spanish
- Dutch
- Portuguese

Management
- Web access via html 5
- Power Proportional Distribution (option)
- Operational history (malfunctions, …)
- Smart energy management
  - monitor if energy use is according to plan
  - detect origins of energy waste
- Setback function
- Sliding temperature

WAGO Interface
- Modular integration of 3rd party equipment
- Large variety of input and outputs available. For more details refer to the options list

Open http interface
- Communication to any third party controller (domotics, BMS, etc.) is possible via http open interface (http option DCM007A51)

System layout
- Up to 512 unit groups can be controlled (ITM + 7 iTM Plus adapters)

Control
- Individual control (512 groups)
- Schedule setting (Weekly schedule, yearly calender, seasonal schedule)
- Interlock control
- Setpoint limitation
- Temperature limit
- Schedule function to activate quiet operation mode on outdoor unit

DALI integration
- Control and monitor the lights
- Easier facility management: receive error signal when light or light controller has a malfunction
- Flexible approach and less wiring needed, compared to classic light scheme
- Easier to make groups and control scenes
- Connection between intelligent Touch Manager and DALI through WAGO BACnet / IP interface

Connectable to
- DX Split, Sky Air, VRV
- HRV
- Chillers (via MT3-EKCMBACIP controller)
- Daikin AHU (via MT3-EKCMBACIP controller)
- Fan coils
- LT and HT hydroboxes
- Biddle Air curtains
- WAGO I/O
- BACnet/IP protocol
- Daikin PMS interface (option DCM010A51)

Daikin Applied Europe

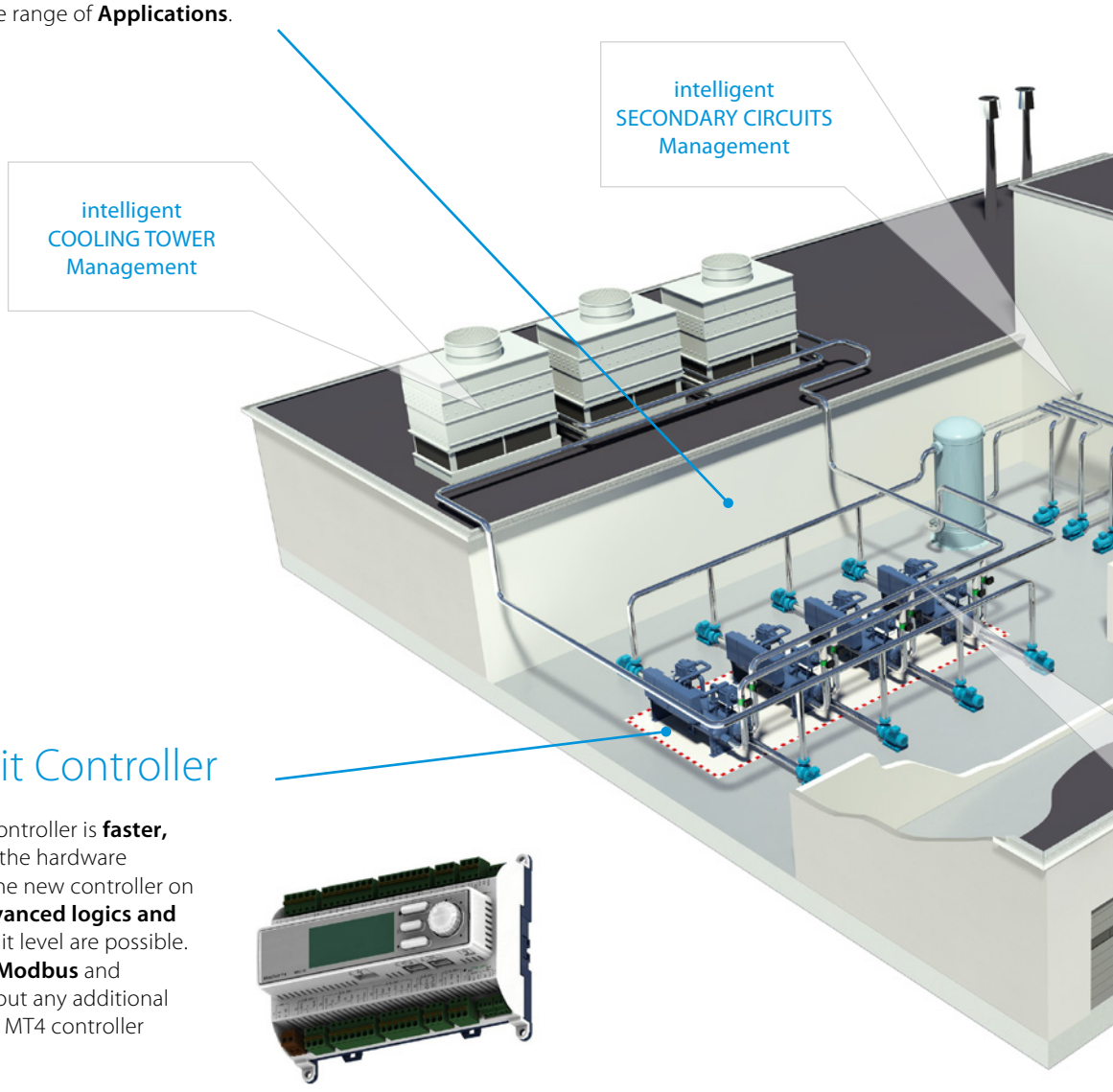
Control Solutions

intelligent Chiller Manager

The intelligent Chiller Manager is a factory-engineered control solution to manage a chiller plant room. It is responsible for the **optimal sequencing and staging** of Chillers, Heat Pumps and Multipurpose units even in a **mixed plant configuration** and in both Heating and Cooling modes.
The extended control solution integrated the management of Cooling Towers and manifolded Pumps for air and water cooled chiller plant.
By reaching higher plant performance and efficiency levels, the intelligent Chiller Manager is the best and qualified solution for your HVAC equipment in a wide range of **Applications**.

Key Benefits

- High performance
- Lower energy & Maintenance Costs
- Increase reliability & lifetime
- Remote control and monitoring through Daikin on Site
- **No additional installation required**



Microtech® 4 Unit Controller

The new **Microtech® 4** (MT4) controller is **faster, smarter and connected**. With the hardware improvements introduced by the new controller on all air/water cooled chillers, **advanced logics and algorithms** development at unit level are possible. Communication protocols like **Modbus** and **BACNet** are also available without any additional hardware required because the MT4 controller supports them natively.

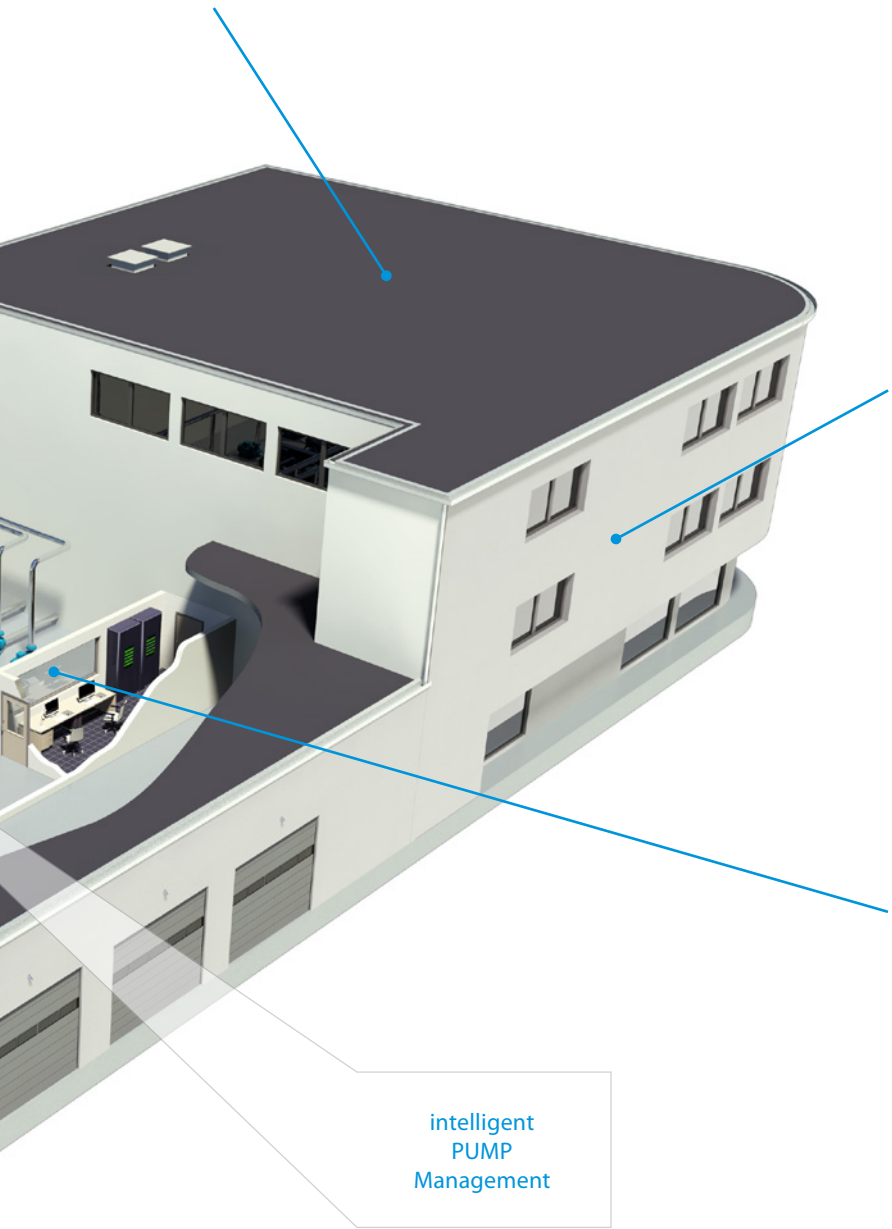
Daikin on Site

Daikin on Site is the unique solution for remote monitoring and smart maintenance. It allows a complete remote operation of every unit with different users and levels of access.

Daikin on site is fully compatible with All Daikin Applied Europe products and it can integrate **third-party products** like **IoT devices** (i.e. IAQ sensors).

Daikin has developed two offers called Daikin on Site: Partner and Daikin on Site: Premium.

- REMOTE MONITORING
- REPORTING
- ALARM TROUBLESHOOTING
- ENERGY ANALYSIS
- REFRIGERANT LEAKAGE DETECTION



Building management system Integration

With MT4 unit the communication protocols such as **Modbus** and **BACNet** are available directly from the controller and activated from Factory when ordered or through the after-sales channel.

Performance Monitoring

With MT4, advanced algorithms implementation in the unit controller are possible, such as the **Performance Monitoring** (Option 186).
This **sensor-less algorithm** calculates the unit cooling capacity by using refrigerant pressure and temperature readings. Electrical power is calculated either from compressor VFD power and fan, or directly measured through optional energy meter. As a standard, **no extra-hardware is required.**

Chiller Intelligent Manager

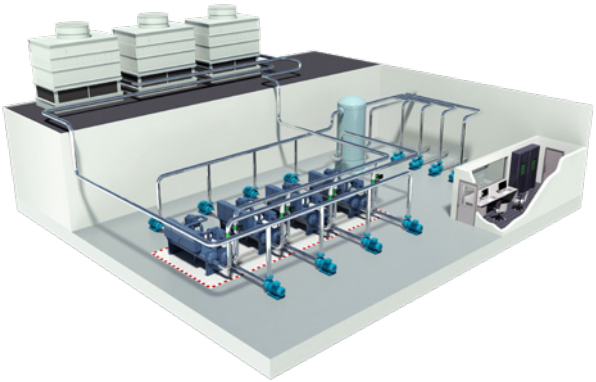
Factory-engineered system control to manage a chiller plant room

Thus optimising its performance and increasing its reliability by:
› Optimal start-up, sequencing & staging of chillers
› Matching chiller capacity to load demand

iCM's main functionalities:

Availability
Determines whether chillers are available or not, based on:
› Inputs from the chiller unit controllers
› Modbus communication status
› Pump status

Sequencing
Optimises the order in which available chillers are turned on and off depending on operating hours, energy efficiency, etc.



Staging
Calculates **energy-optimal stage-up/stage-down** of the chiller by determining the increased capacity demand by capacity control, compensation of temperature and rotation. This function aims at providing the most energy-efficient combination of chillers on a continuous basis.

Stopping Last Chiller/Recycling
Captures a rise in demand when the **last chiller is staged down,** by operating the pump dedicated to the next ON chiller at a minimum VFD frequency.

Min/Max Operating Chiller Setting
Ensures that the number of operating chillers always **stays within a certain range,** regardless of changes in demand.

Primary Pump control
Primary evaporator and condenser pump control for dedicated and manifolded pumps thanks to iPM panel

Secondary Pump Control
Control of up to 12 secondary circuits thanks to iSM panel extension

Cooling Tower Optimization
Control and Optimization of Cooling Tower systems thanks to iCT extension modules.

Remote Connection through Daikin on Site
24/7 monitoring and control of iCM plants through Daikin on Site cloud service.

Why choose iCM?

› Optimise performance
› Increase reliability
› Reduce energy costs
› Reduce maintenance costs
› Factory-engineered and tested
› Remote control and monitoring. From one-time commissioning to real-time commissioning

Daikin is the best qualified partner to optimise the operation of a Daikin chiller plant room.

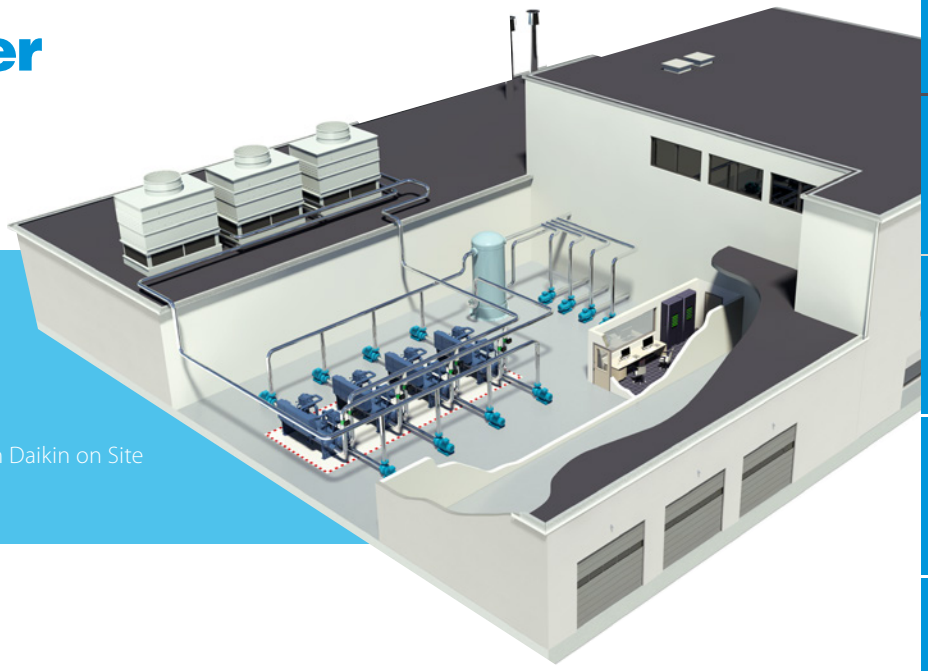
Remote control and monitoring possibilities

(valid for both Standard and Customised versions)

› **Connectivity to Daikin's remote monitoring and control system (www.daikinonsite.com)** for remote monitoring and service providing Internet connection to the main controller
› **Integration with general BAS/BMS** offered through BACnet or Modbus Modules based on BACnet/IP or Modbus RTU/RS-485 protocols
› **Built-in HMI, Remote HMI, Web HMI and daikinonsite.com** are available for control and configuration

Integrated logics for Plant Management

Chiller Intelligent Manager



Key Benefits

› High performance
› Lower energy & Maintenance Costs
› Increase reliability & lifetime
› Remote control and monitoring through Daikin on Site
› **No additional installation required**

Control strategies

Advanced control strategies can be chosen to optimise units life time and the energy efficiency of a chillers plant:

› by sequencing it is decided which unit must start or stop
› by staging the unit shares the load based on a threshold specified by the user

Control options

iCM can manage:

› Up to 16 units Heating/Cooling mode, with iCM expanded kit
› Up to 8 units Heating/Cooling mode
› Special control options such as: VPF, Demand Limit, Rapid Restart are manged by iCM in a multiple unit system
› Heat recovery option management
› Free cooling option management
› Manifolded pumps management (evaporator/condenser) – iPM control panel is required
› Cooling tower system management – iCT control panel is required
› Secondary circuits management - iSM control panel is required

What are the main differences between Master/Slave and iCM?

For Daikin unit equipped with MT4, iCM are set of functions embedded directly in the unit controller. In addition for those applications not covered by the embedded functions, iCM customized are also available.

While Master/Slave can manage systems composed by units model of the same type, iCM can manage cooling, heating and plants made of different kind of units

Feature	Master/Slave	New iCM
Number of chillers	UP TO 2	UP TO 16
Plants with All Chillers	same models	YES
Plants with all Heat Pumps	same models	YES
Plants with Multipurpose	YES	YES
Mix of Chillers (max 2 circuits) + Multipurpose	NO	**YES**
Mix of Chillers + Heat Pumps	NO	**YES**
Chillers with Heat Recovery	NO	**YES**
Chillers with free cooling	NO	**YES**
Units with modulable capacity control	YES	YES
Units with step capacity control	YES	YES

Product line-up

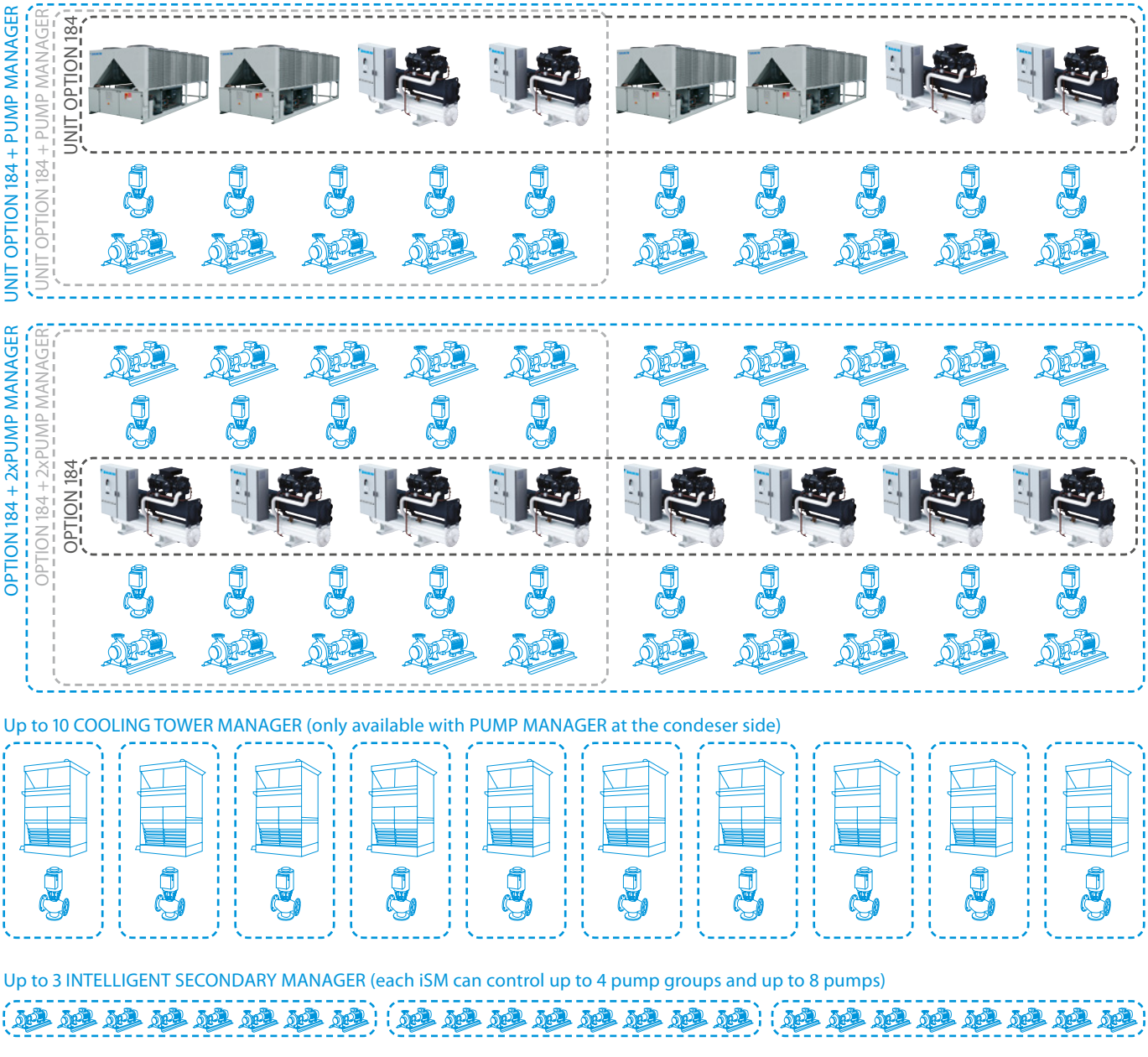
intelligent Chiller Manager

iCM as unit option 184 (up to 16 with iCM expanded kit):
› Up to 8 daikin chillers
› Mixed systems (Chiller + heat pumps or chillers + multipurpose)
› Heating/cooling operating modes
› Heat recovery and Free cooling management
› Units with modulable and step capacity control

Intelligent Pump Manager:
› Up to 5 dedicated or manifolded pumps (evaporator or condenser)
› Up to 10 dedicated or manifolded pumps (evaporator or condenser)

Intelligent Cooling Tower Manager:
› Up to 10 manifolded cooling towers (available with Pump Manager at the condenser side)
›

intelligent Secondary Circuits Manager:
› Up to 8 pumps divided in up to 4 pump groups (up to 3 ism can be connected for a total of 12 pump groups and 24 secondary pumps)



DAIKIN

RTD

Modbus Interface

RTD-RA

› Modbus interface for monitoring and control of residential indoor units

RTD-NET

› Modbus interface for monitoring and control of Sky Air, VRV, VAM and VKM

RTD-10

› Advanced integration into BMS of Sky Air, VRV, VAM and VKM through either:
- Modbus
- Voltage (0-10V)
- Resistance

› Duty/standby function for server rooms

RTD-20

› Advanced control of Sky Air, VRV, VAM/VKM and air curtains
› Clone or independent zone control
› Increased comfort with integration of CO_2 sensor for fresh air volume control
› Save on running costs via
- pre/post and trade mode
- set point limitation
- overall shut down
- PIR sensor for adaptive deadband

RTD-HO

› Modbus interface for monitoring and control of Sky Air, VRV, VAM and VKM
› Intelligent hotel room controller

RTD-W

› Modbus interface for monitoring and control of Daikin Altherma Flex Type, VRV HT hydrobox and small inverter chiller

DCOM-LT/MB

› Modbus interface of Daikin Altherma air-to-water heat pumps, hybrid heat pumps and ground source heat pumps

DCOM/LT-IO

› Voltage & resistance control in addition to Modbus

Overview functions





Main functions			RTD-RA	RTD-NET	RTD-10	RTD-20	RTD-HO
Dimensions	H x W x D	mm	80 x 80 x 37.5	100 x100 x 22			
Key card + window contact							✓
Set back function			✓				✓
Prohibit or restrict remote control functions (setpoint limitation, ...)			✓	✓	✓	✓**	✓
Modbus (RS485)			✓	✓	✓	✓	✓
Group control			✓(1)	✓	✓	✓	✓
0 - 10 V control					✓	✓	
Resistance control					✓	✓	
IT application			✓		✓		
Heating interlock					✓	✓	
Output signal (on/defrost, error)					✓	✓****	✓
Retail application						✓	
Partitioned room control						✓	
Air curtain				✓***	✓***	✓	

(1): By combining RTD-RA devices

Control functions	RTD-RA	RTD-NET	RTD-10	RTD-20	RTD-HO
On/Off	M,C	M	M,V,R	M	M*
Set point	M	M	M,V,R	M	M*
Mode	M	M	M,V,R	M	M*
Fan	M	M	M,V,R	M	M*
Louver	M	M	M,V,R	M	M*
HRV Damper control		M	M,V,R	M	
Prohibit/Restrict functions	M	M	M,V,R	M	M*
Forced thermo off	M				

Monitoring functions	RTD-RA	RTD-NET	RTD-10	RTD-20	RTD-HO
On/Off	M	M	M	M	M
Set point	M	M	M	M	M
Mode	M	M	M	M	M
Fan	M	M	M	M	M
Louver	M	M	M	M	M
RC temperature		M	M	M	M
RC mode		M	M	M	M
N° of units		M	M	M	M
Fault	M	M	M	M	M
Fault code	M	M	M	M	M
Return air temperature (Average /Min/Max)	M	M	M	M	M
Filter alarm		M	M	M	M
Termo on	M	M	M	M	M
Defrost		M	M	M	M
Coil In/Out temperature	M	M	M	M	M

Main functions			RTD-W
Dimensions	H x W x D	mm	100x100x22
On/off prohibition			✓
Modbus RS485			✓
Dry contact control			✓
Output signal (operation error)			✓
Space heating / cooling operation			✓
Domestic hot water control			✓
Smart Grid control			

Control functions	
On/Off Space heating/cooling	M,C
Set point leaving water temperature (heating / cooling)	M,V
Room temperature setpoint	M
Operation mode	M
Domestic Hot water ON	
Domestic Hot Water reheat	M,C
Domestic Hot Water reheat setpoint	
Domestic Hot Water storage	M
Domestic Hot Water Booster setpoint	
Quiet mode	M,C
Weather dependent setpoint enable	M
Weather dependent curve shift	M
Fault/pump info relay choice	
Control source prohibition	M

Smart grid mode control	
Prohibit Space heating/cooling	
Prohibit DHW	
Prohibit Electric heaters	
Prohibit All operation	
PV available for storage	
Powerful boost	

Monitoring functions	
› On/Off Space heating/cooling	› M,C
› Set point leaving water temperature (H/C)	› M
› Room temperature setpoint	› M
› Operation mode	› M
› Domestic Hot Water reheat	› M
› Domestic Hot Water storage	› M
› Number of units in the group	› M
› Average leaving water temperature	› M
› Remocon room temperature	› M
› Fault	› M,C
› Fault code	› M
› Circulation pump operation	› M
› Flow rate	
› Solar pump operation	
› Compressor status	› M
› Desinfection operation	› M
› Setback operation	› M
› Defrost/ start up	› M
› Hot start	
› Booster Heater operation	
› 3-Way valve status	
› Pump running hours accumulated	› M
› Compressor running hours accumulated	
› Actual leaving water temperature	› M
› Actual return water temperature	› M
› Actual DHW tank temperature (*)	› M
› Actual refrigerant temperature	
› Actual outdoor temperature	› M

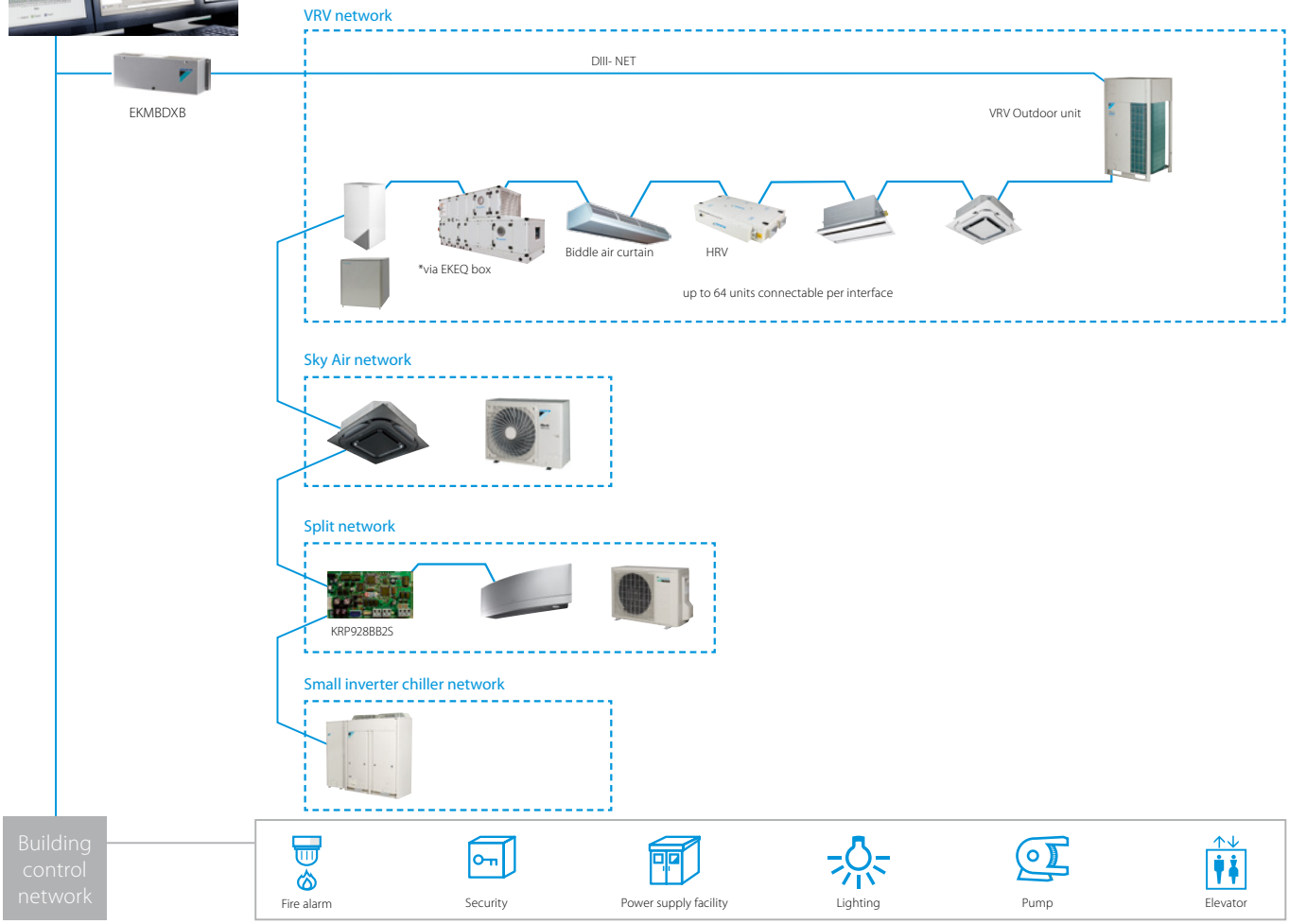
M : Modbus / R: Resistance / V: Voltage / C: control
* : only when room is occupied / ** : setpoint limitation / (*) if available
*** : no fan speed control on the CYV air curtain / **** : run & fault

EKMBDXB

DIII-net Modbus interface

Integrated control system for seamless connection between Split, Sky Air, VRV and small inverter chillers and BMS systems

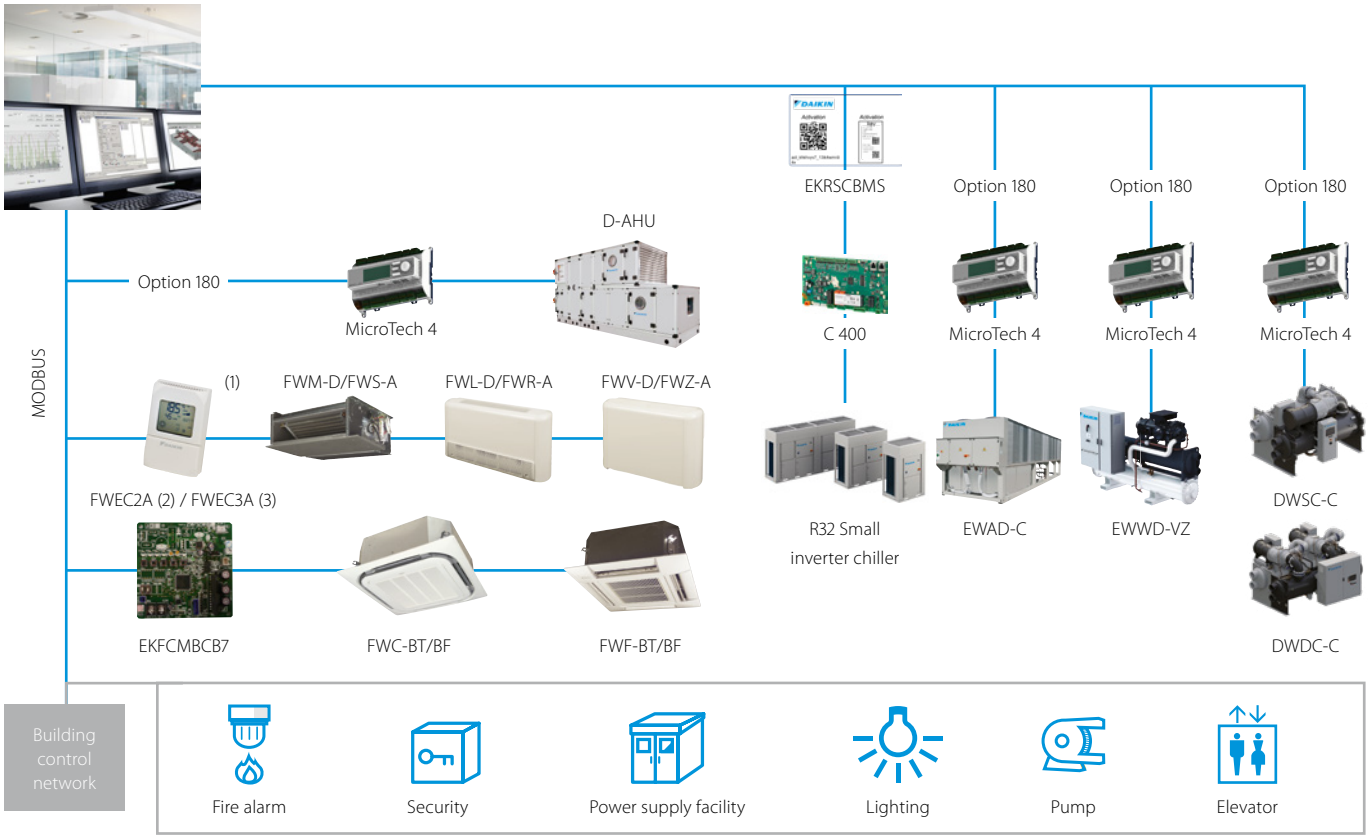
› Communication via Modbus RS485 protocol
› Detailed monitoring and control of the VRV total solution
› Easy and fast installation via DIII-net protocol
› As the Daikin DIII-net protocol is being used, only one modbus interface is needed for a group of Daikin systems (up to 10 outdoor units systems).



			EKMBDXB7V1
Maximum number of connectable indoor units			64
Maximum number of connectable outdoor units			10
Communication	DIII-NET - Remark		DIII-NET (F1F2)
	Protocol - Remark		2 wire; communication speed: 9,600 bps or 19,200 bps
	Protocol - Type		RS485 (modbus)
	Protocol - Max. Wiring length	m	500
Dimensions	HeightxWidthxDepth	mm	124x379x87
Weight		kg	2.1
Ambient temperature - operation	Max.	°C	60
	Min.	°C	0
Installation			Indoor installation
Power supply	Frequency	Hz	50
	Voltage	V	220-240

Modbus interface

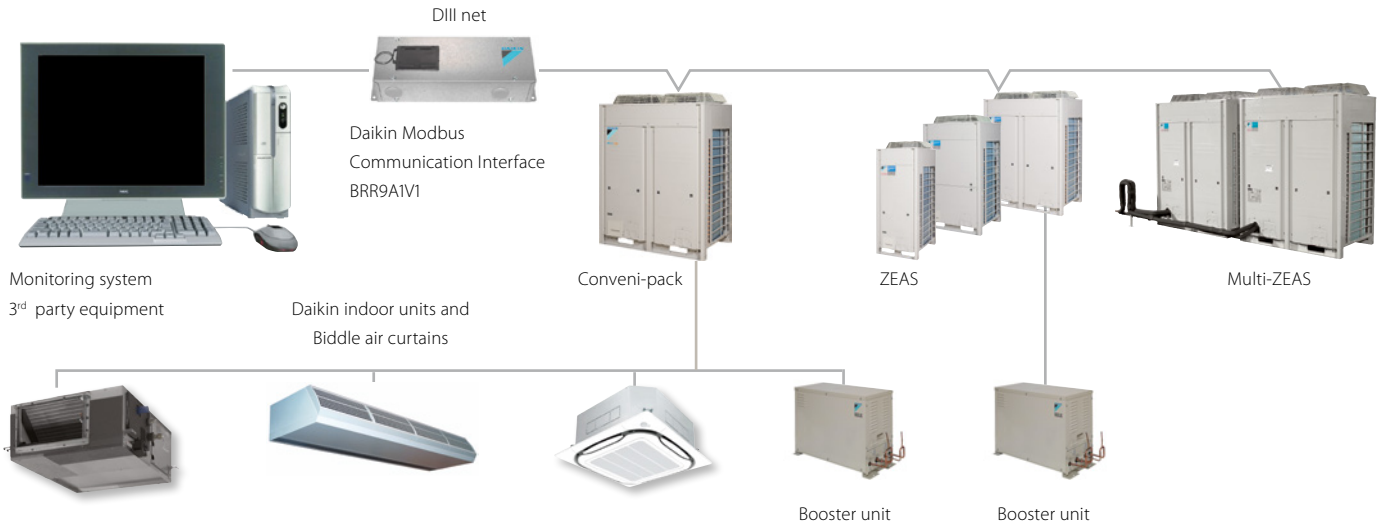
Integrate chillers, fan coil units and air handling units in BMS systems via modbus protocol



(1) The communication module is integrated in the controller (2) Connection to FWV-D, FWL-D & FWM-D (3) Connection to FWV-D, FWL-D, FWM-D and to FWZ-A, FWR-A, FWS-A

Integrate Refrigeration units in BMS systems via modbus protocol

BRR9A1V1



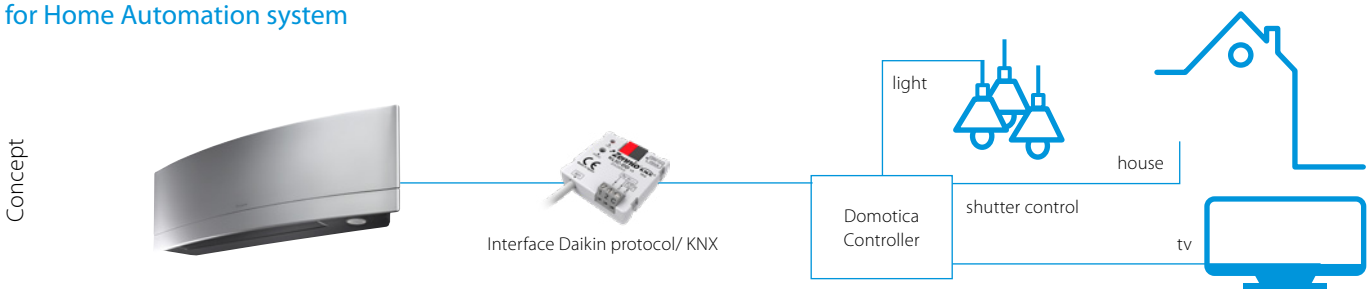
* For all connectable indoor units and Biddle air curtains please refer to the Conveni-pack pages in this catalogue

KLIC-DDV3
KLIC-DI_V2

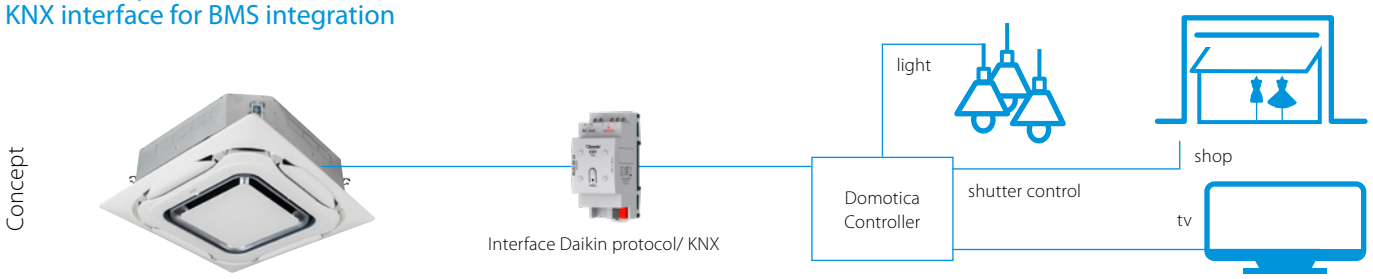
KNX interface

Integration of Split, Sky Air and VRV in HA/BMS systems

Connect split indoor units to KNX interface for Home Automation system



Connect Sky Air / VRV indoor units to KNX interface for BMS integration



KNX interface line-up

The integration of Daikin indoor units through the KNX interface allows monitoring and control of several devices, such as lights and shutters, from one central controller. One particularly important feature is the ability to programme a 'scene' - such as "Home leave" - in which the end-user selects a range of commands to be executed simultaneously once the scenario is selected. For instance in "Home leave", the air conditioner is off, the lights are turned off, the shutters are closed and the alarm is on.

KNX interface for

	 KLIC-DDV3 size 45x45x15mm	 KLIC-DI_V2 size 90x60x35mm	
	Split	**Sky Air**	**VRV**
Basic control			
On/Off	●	●	●
Mode	Auto, heat, dry, fan, cool	Auto, heat, dry, fan, cool	Auto, heat, dry, fan, cool
Temperature	●	●	●
Fan speed levels	3 or 5 + auto	2 or 3	2 or 3
Swing	Stop or movement	Stop or movement	Swing or fixed positions (5)
Advanced functionalities			
Error management	Communication errors, Daikin unit errors		
Scenes	●	●	●
Auto switch off	●	●	●
Temperature limitation	●	●	●
Initial configuration	●	●	●
Master and slave configuration		●	●

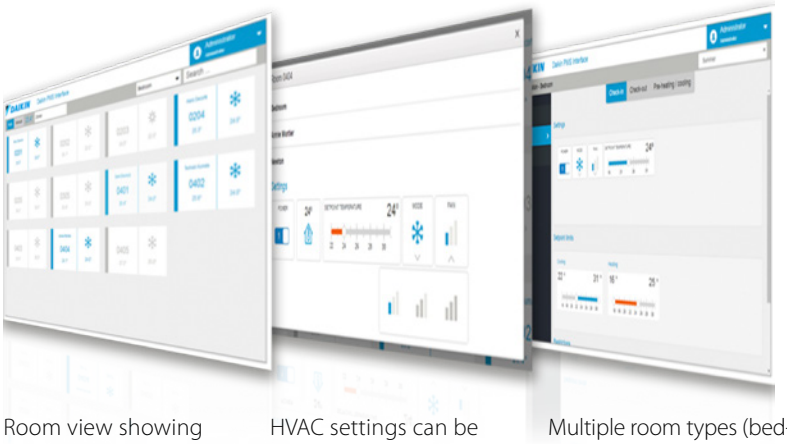
DCM010A51

PMS Interface

Hotel interface connecting Daikin HVAC Property Management Systems

Features

- User-friendly interface for easy front desk support in hotels, conference centers, …
- Compatible with Oracle Opera PMS (formerly known as Micros Fidelio)
- Automated push of indoor unit settings based on the Opera PMS Check-In and Check-Out commands
- Energy saving thanks to the possibility to limit temperature setpoint
- Up to 5 customized operation profiles based on weather conditions
- Available in 23 languages
- Up to 2,500 units / rooms can be managed
- The Daikin PMS is using the FIAS protocol, designed by Oracle, to interface with the Property Management System.



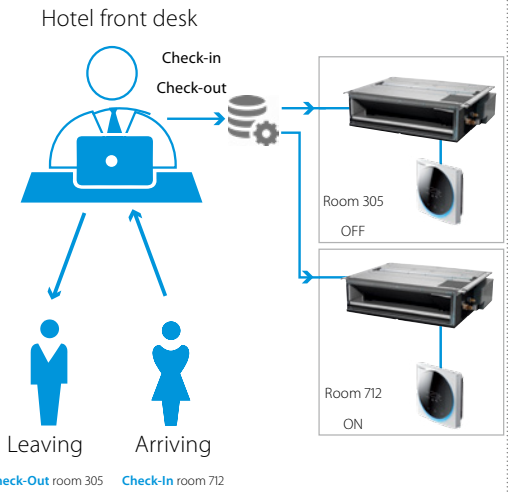
Room view showing room status: check-in, check-out, pre-heating / cooling status, room temperature and A/C status

HVAC settings can be easily observed and changed by the reception desk

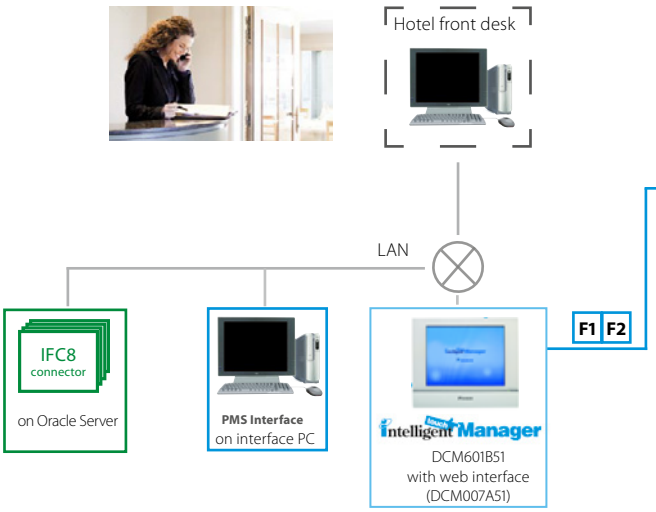
Multiple room types (bed-room, meeting room, …) can be defined with customized A/C settings for each type

Hotel case example:

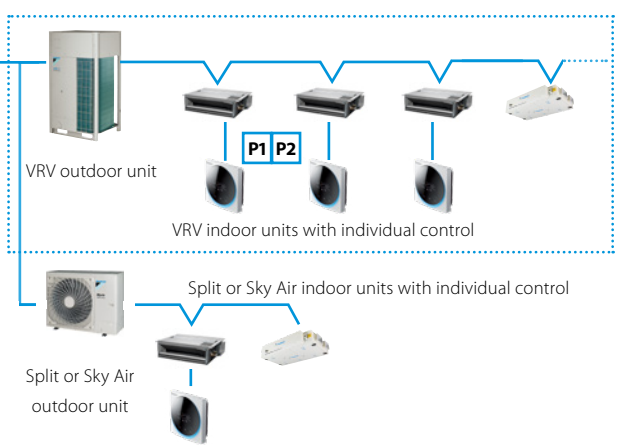
› On check-in the HVAC for the room is automatically switched on
› On check-out the HVAC for the room is automatically switched off.
› Increased hotel customer experience by pre-heating / cooling of booked rooms



Simplified configuration of Daikin PMS interface



Daikin HVAC network

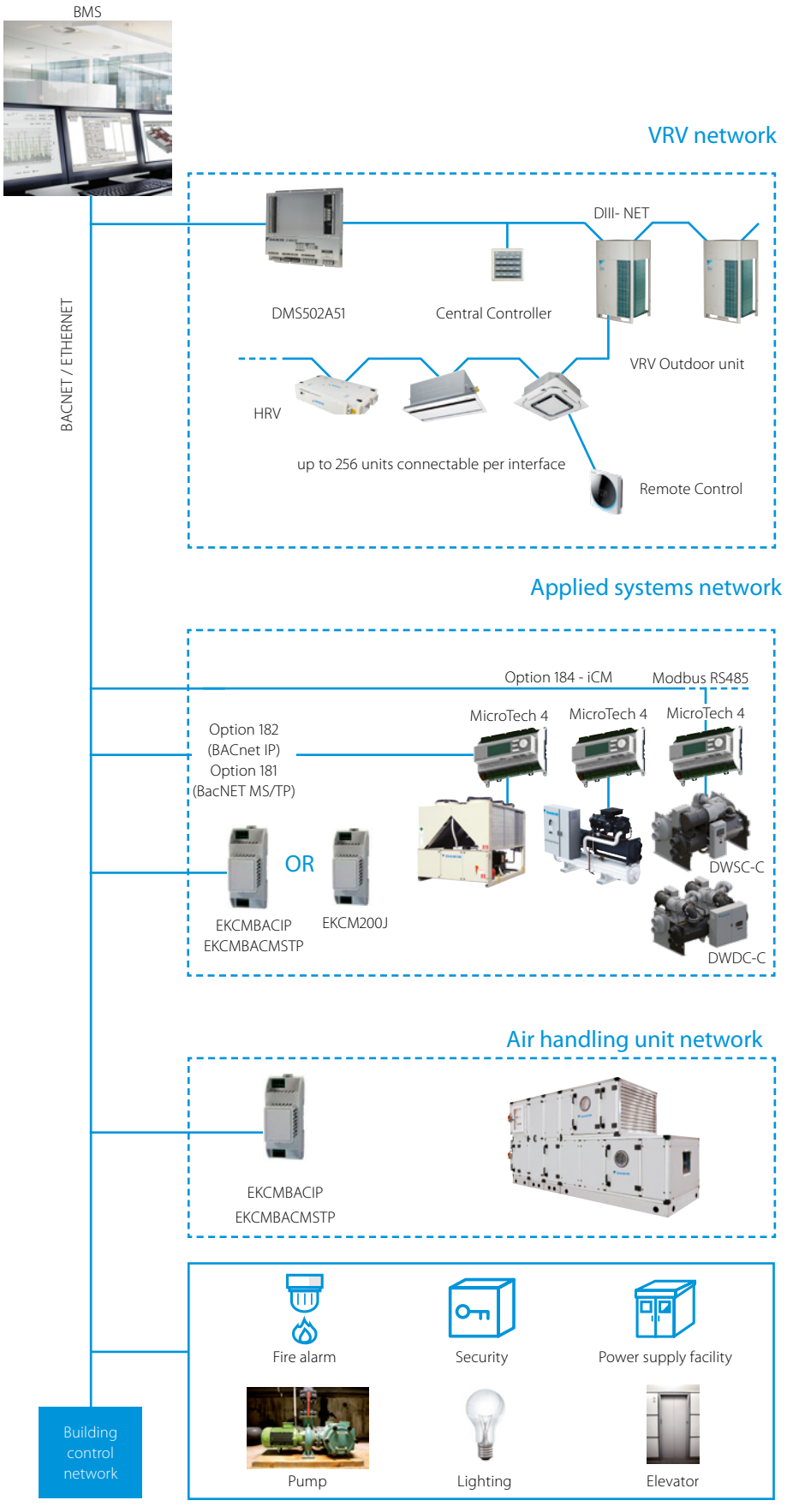


DMS502A51 / EKACBACMSTP / EKCMBACIP / EKCMBACMSTP

BACnet Interface

Integrated control system for seamless connection between VRV, applied systems, air handling units and BMS systems

- Interface for BMS system
- Communication via BACnet protocol (connection via Ethernet)
- Unlimited site size
- Easy and fast installation
- PPD data is available on BMS system (only for VRV)

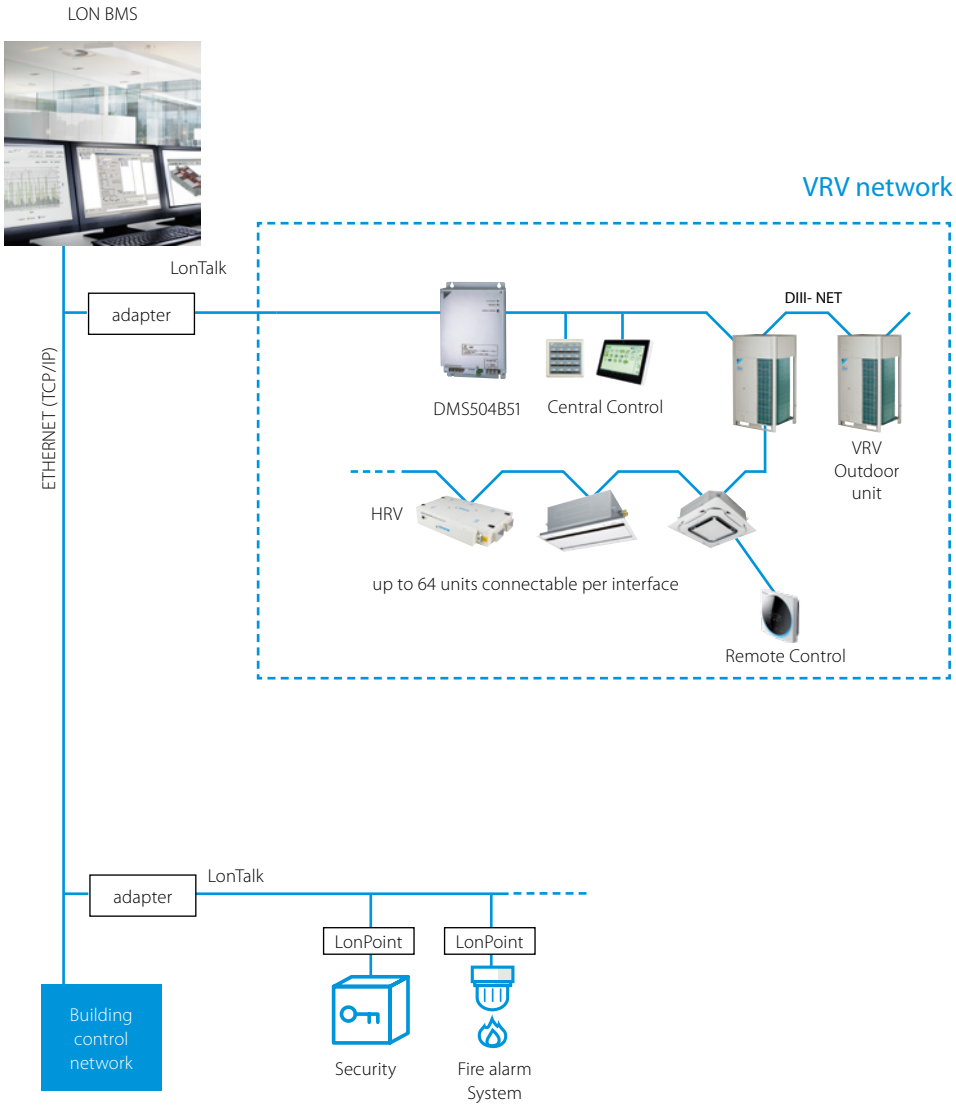


DMS504B51

LonWorks Interface

Open network integration of VRV monitoring and control functions into LonWorks networks

- Interface for Lon connection to LonWorks networks
- Communication via Lon protocol (twisted pair wire)
- Unlimited sitesize
- Quick and easy installation



Daikin Cloud Service

to achieve optimal operation

Daikin Cloud Service is a cloud-based remote control and monitoring solution for DX systems. Using enhanced control, monitoring and predictive logic, Daikin Cloud Service provides real-time data and support from Daikin experts to help you identify cost-saving opportunities, increase the lifetime of your equipment and reduce the risk of unexpected issues.

Monitor & control* your system no matter where you are while teaming up with Daikin experts

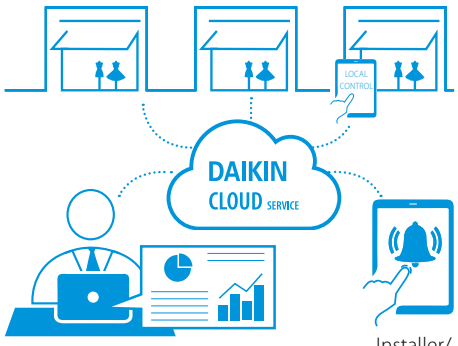
Remote control and energy visualisation

Puts you in the driving seat of your energy management

- ☑ Control and monitor your premises, wherever you are
- ☑ Centralised control and monitoring of all your premises
- ☑ Check errors remotely without having to go on site
- ☑ Visualise energy consumption and reduce energy waste by comparing different premises
- ☑ Graphical visualization of IEQ parameters (frequency day, week, month, year)
- ☑ Export & print IEQ parameters

Multi-site monitoring

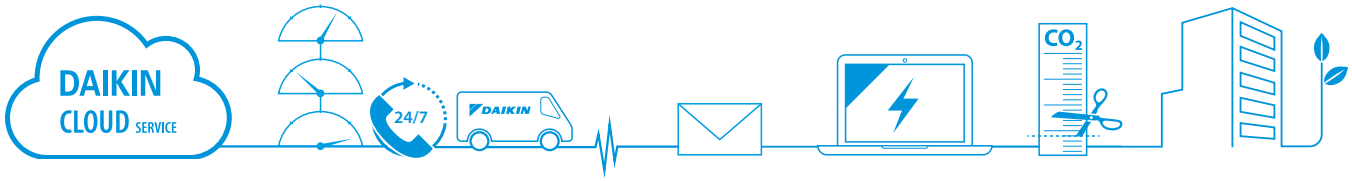
From one to an ∞ number of sites



Remote support and diagnostics

Daikin specialist supervision, so you can focus on your core business

- ☑ Early warning of system deviations to maximise system uptime and avoid emergency repairs**
- ☑ Service providers have access to operational data so they arrive on site prepared
- ☑ Remote expert assistance in case of errors



Advice and optimisation

Get the best out of your system through expert advice

- ☑ Periodical analysis and optimisation report by experts
- ☑ Personalised actions to maximise energy efficiency and comfort
- ☑ Increased system lifetime as the system runs as it should

Daikin Cloud Service requires a subscription. Contact your local sales representative for more information.

* Remote Control function via Daikin Cloud Service only available for sites with an Intelligent Tablet controller

** Only available for VRV systems

Daikin Cloud Service packages

	Control and monitoring	Remote support and diagnostics	Advice and optimisation
Remote control, scheduling and interlocking	✓ (DCC601A51 only)	✓ (DCC601A51 only)	✓ (DCC601A51 only)
Energy monitoring	✓	✓	✓
Multi-site benchmark	✓	✓	✓
Alarm history and e-mail notifications**	✗	✓	✓
Predictions and e-mail notifications**	✗	✓	✓
Operational data access	✗	✓	✓
Indoor use analysis	✗	✓	✓
Outdoor use analysis	✗	✓	✓
Remote diagnostic and support from Daikin	✗	✓	✓
Periodical analysis and optimisation advice from Daikin	✗	✗	✓
Can be combined with maintenance programmes: - Technical inspection - Preventive Maintenance Plan - Comprehensive Maintenance Plan	✗	✗	✓

Packages subject to local availability
Daikin Cloud Service replaces VRV Cloud and i-Net services.

Flexible solution

Manage your premises according to your needs, using a local control or remotely via Daikin Cloud Service, or a combination of both.

Control*, no matter where you are

Daikin Cloud Service gives you full control of one or more premises wherever you are, using your PC, tablet or smartphone.

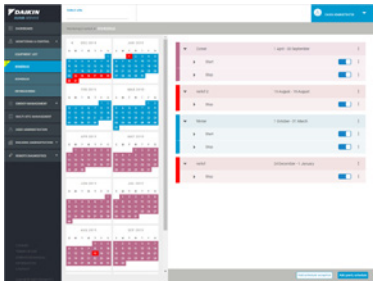
Predictive logic for VRV to prevent breakdowns

The operational data is continuously analysed by Daikin algorithms to predict potential failures and avoid unexpected costs.

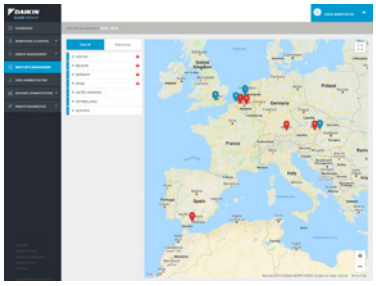
Compatible with:

› Intelligent Tablet Controller (DCC601A51)
› Intelligent Touch Manager (DCM601B51) + IoT gateway
› LC8 + IoT gateway

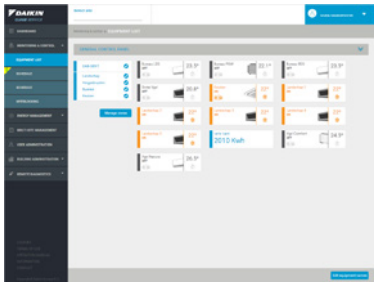
1. Clear dashboard overview



3. Easy setting of schedules

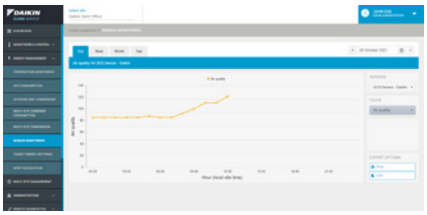


5. Multi site management

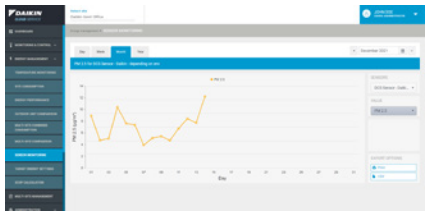


2. Monitor and control your system

4. Energy management and consumption follow up



IEQ dashboard on DCS



DCS IEQ Sensor Monitoring

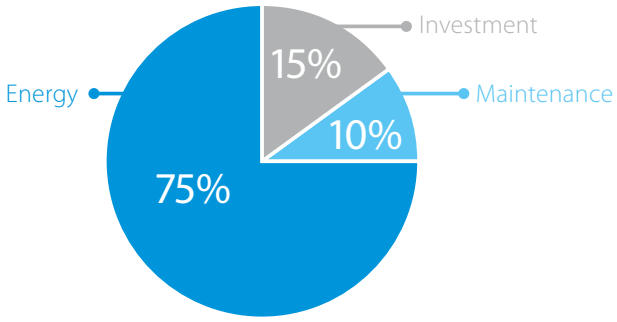
* Remote Control function via Daikin Cloud Service only available for sites with an Intelligent Tablet controller

** Only available for VRV systems

Daikin on Site

Why
Daikin on Site?

Operating costs like energy and maintenance typically account for 85% of the system's total lifetime cost. Undiscovered energy waste and incorrect operation will increase costs and can even lead to unscheduled interruptions.



Typical Life cycle Cost of a chiller (15 years)

Using Daikin on Site monitoring results in optimum use and costs over the system's entire lifetime:

› Enhanced control and measuring
› Monitors the system
› Reduces risks at the earliest possible moment
› Keeps the system running as it was intended to
› Controls your IEQ by connecting our sensor

What
is Daikin on Site?

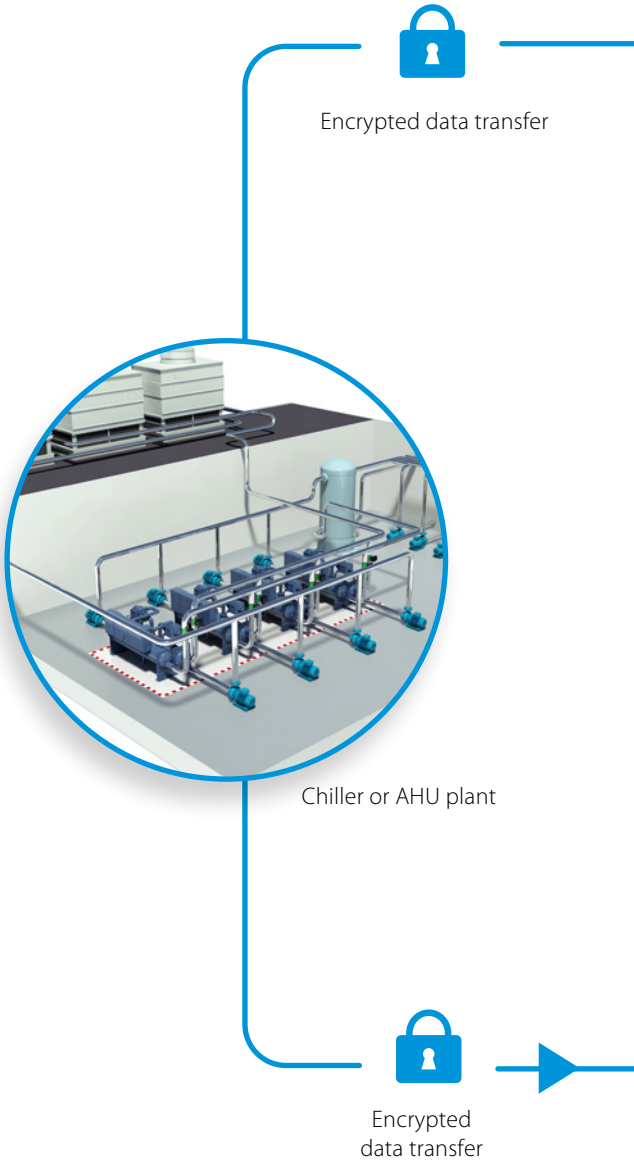
A solution for customer specific needs

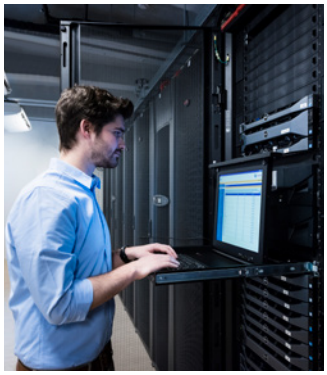
The Daikin on Site cloud server collects operational data from the control system of a Daikin chiller or air handling unit plant. Daikin's Smartcentre then turns this data into useful information on a web user interface. Daikin on Site has predefined user roles like:

› **operator**
› **service provider**
› **Daikin specialists**

The Daikin on Site platform's features are designed to:
› Increase uptime, reduce unscheduled interruptions
› Optimise efficiency and reduce energy waste
› Increase lifetime and avoid wear by misuse
› Give insight into the optimum use of equipment, including advice from a Daikin expert

We will combine Daikin on Site remote monitoring with the complementary service programme best suited to your needs.





The remote monitoring for Daikin products

Let's enter in Daikin connected HVAC with Daikin on Site cloud solution. An enriched offer meeting every needs. From a basic control up to a full and advanced monitoring of your HVAC equipment directly from your desk. A wide variety of HVAC application can benefit from Daikin on Site and its connected services.

With Daikin on Site, your HVAC equipment will reach high reliability and efficiency levels. No more stops and long waiting time for Alarm troubleshooting. Thanks to a continuous monitoring and advanced tools, Daikin on Site helps to improve the overall system lifetime. A Daikin expert is ready to help and keep monitored your plant, suggesting actions and system improvements.

Daikin on Site is the best solution to improve your HVAC efficiency.

SOON AVAILABLE

CONNECT

Every unit is connected, monitored and controlled through Daikin on Site. This is the perfect tool for remote on/off, setpoint adjustments and alarm notifications.

PARTNER

Keep and maintain the control. Receive alarm notifications, troubleshoot alarms remotely, change setpoints and settings and visualize the status of your unit with graphs and trends.

PREMIUM

Enable the full power of Daikin on Site with additional tools and services to improve energy efficiency and optimize the working conditions and operations of your Plants.

SERVICE TO CUSTOMER

You can hand it to us

CLOUD DATA WAREHOUSE

Encrypted data transfer

- Local Daikin Monitoring Center
- Service company monitoring center
- Facility manager/owner

IEQ Sensor

Our New Indoor Environmental Quality Sensor

Daikin's newest device measures and analyzes your indoor environment to improve your well-being

Why
Indoor Air Quality Matters

Indoor Air Quality

Indoor Air Quality (IAQ) refers to the quality of the air in indoor environments, which affects building's occupants during their everyday lives. When designing HVAC systems for residential buildings, schools, offices, or light commercial buildings, many things must be considered. While it is important to meet the cooling and heating demand, we should also consider aspects such as ventilation, air filtration, and indoor air quality.

Did you know that breathing indoor air, whether it is at home, at the office, or in a hotel room, can be much more polluted than outdoor air? Remember that 90% of our life is spent indoors, and indoor air quality can be 2 to 5 times worse than outdoor air.

Indoor Air Quality components

Indoor Environment Quality (IEQ) is broader than IAQ, and includes lighting, noise, and electromagnetic fields.

1. Ventilation
Ensures the provision of fresh and clean air

2. Energy recovery
Delivers energy savings by transferring heat and moisture between airflows

3. Air processing
Ensures clean and healthy air by filtering out pollen, dust, and odours that are harmful to our health

4. Humidification
Ensures the desired moisture level in the conditioned space

Ventilation

Ventilation systems ensure optimal climate conditions by providing a fresh, healthy, and comfortable environment for buildings of all sizes, as well as for different applications.

In a completely closed room, air cannot easily enter or leave, causing air pollutants to accumulate which could affect the health of the people who use the room. Ventilation is essential for diluting and removing these air pollutants.

A well-maintained ventilation system with an adequate air-exchange rate have been demonstrated to be an effective solution to protect people from contaminants, including viruses.

Monitoring Indoor Air Quality

Nowadays, most things that surround us can be monitored and tracked, even Indoor Air Quality (IAQ). Monitoring and tracking IAQ values can help us to understand how our surrounding environment affects our well-being, and then take action to improve the quality of the environment in which we live, whether this is our homes, the office, a restaurant, schools, or shops.

Features

The Daikin IEQ Sensor measures your well-being by tracking indoor air quality values, environmental comfort, and electromagnetic pollution. It is available with 12 sensors and 15 parameter measures, and connects through your Wi-Fi network or via NB-IoT technology.

☑ Complete Standalone Installation

The Daikin IEQ Sensor does not have to be paired with another product, for an extremely easy and completely standalone installation that takes about a minute. The device can be powered up with microUSB power supply (included). The material code is AIRSENSEPROPLUS.

☑ Caelum Monitoring Platform

The device connects to Caelum, Daikin's monitoring platform, at www.daikiniaq.com. This enables you to easily monitor Indoor Air Quality levels and create regular reports based on the data detected by the sensor. You can even use the platform to show your indoor air quality levels to your visitors.

☑ Mobile App

The configuration app is available as Daikin AirSense on both the App Store and Play Store. Once installed on your mobile device and logged in, scan the QR code on the IEQ sensor and the app will guide you through the entire configuration process. Once your sensor is configured, you will have access to the entire set of functions from your mobile.

☑ Connectivity

The IEQ sensor ensures perfect integration with Daikin on Site and Daikin Cloud Service, Daikin's remote monitoring and smart maintenance platform. It gives you perfect control over the entire heating, ventilation and air conditioning system installed in your building. You can use interlock function between IAQ sensor and AHUs.

☑ Available ReFilter tools

Product Hierarchy

› Material – Product hierarchy: Accessory
› Material name: AIRSENSEPROPLUS
› Business Pillar: SERVICES

☑ Green Building Certification

Installing the Daikin IEQ sensor can help you achieve better sustainability ratings and green building projects certified with LEED and WELL certification thanks to Indoor Environmental Quality credits.

☑ Video wall

The video wall is a great tool to have a general overview of the measurements conducted by the device. This screen can be shared with the occupants of the buildings to show in each moment the Indoor Air Quality status.

☑ Communication capability

NB-IoT: This technology can reach devices in areas where reception is poor or difficult to reach. Complete standalone installation. This is a perfect solution for service purposes where access to local Wi-Fi is not allowed or not available.

Wi-Fi: Easy and complete standalone installation.

Daikin IEQ Sensor kit

The IEQ sensor kit comes in a carton box containing the following items:

› Power Supply plug
› USB - Micro USB Cables
› Wall fixing kit
› Quick installation guides

NB-IoT or WiFi?

Communication is either Wifi or NB-IoT network (mobile network). The NB-IoT services is available in the following 18 countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Portugal, Romania, Spain, Switzerland, United Kingdom. NB-IoT services carry a fee (invoiced after the first year of usage).

Sensor characteristics

Fine Dust (PM10/PM2.5)
Range: 0 to 1,000 µg/m3
Precision: (from 0 µg/m3 to 100 µg/m3): ±15 µg/m3
Precision: (from 100 µg/m3 to 1,000 µg/m3): ±15%
Resolution: 1 µg/m3

Temperature
Range: -40 °C a 85 °C
Precision: ±1 °C (between 0 °C and 65 °C)
Resolution: 0.1 °C

Humidity
Range: 0 to 100% RH
Precision: ±3% RH
Resolution: 0.1% RH

Ambient Light
Range: 0 lux to 120,000 lux
Precision: ±10%
Resolution: 0.1 lux

Air Pressure hPa
Range: 300 to 1,100 mbar (hPa)
Precision: 0.1 mbar (hPa)
Resolution: 0.1 mbar (hPa)

Electrosmog
LF Range: 0 - 20.000 nT - Range: 5 Hz - 120 Hz
Precision: ±5% - Resolution: 25nT
HF Range: 0 to -10 V/m - Range: 50 MHz - 300 GHz
Precision: ±10% - Resolution: 0.1 V/m
Measurements performed on 3 axes

CO_2
Range: 0 to 5,000 ppm
Precision: ±30 ppm (between 0 and 1,000 ppm)
±3% (over 1,000 ppm)
Resolution: 1 ppm

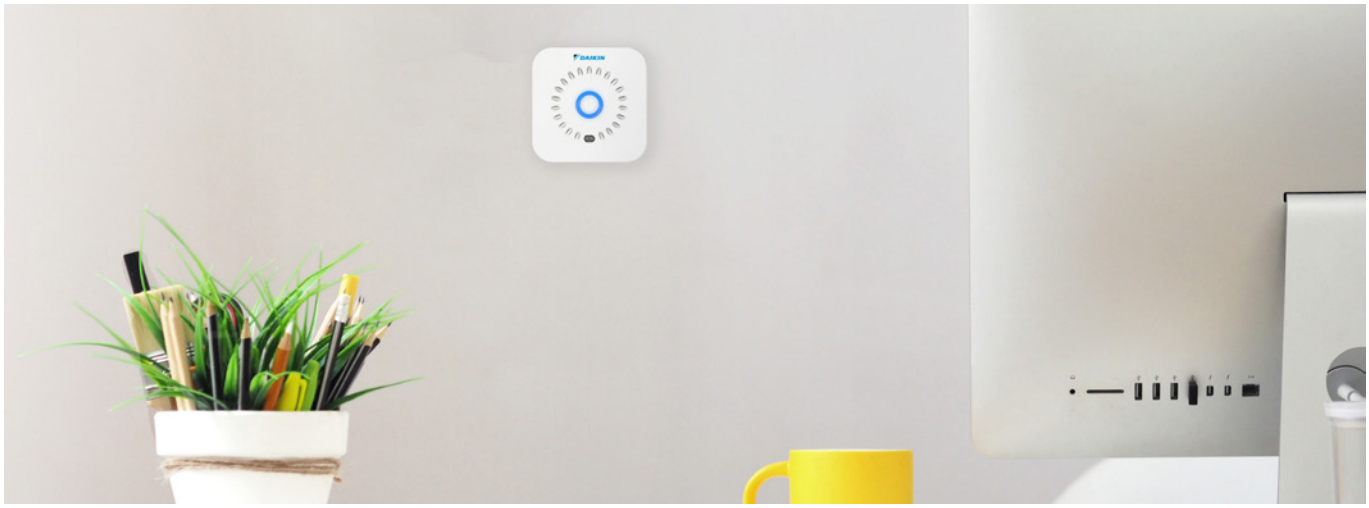
TVOC
Range: 0 ppb to 1,187 ppb
Resolution: 1 ppb
Precision: ±10%

Air quality
Range: 0 to 500
Precision: ±15%
Resolution: 0.1

Sound Pressure
Range: 28 to 120 dBspl
Frequency: from 50 Hz to 20 KHz
Precision: ±1 dBspl
Resolution: 0.1 dBspl

CO_2e
Range: 400 to 6,000 ppm
Precision: 20%
Resolution: 1 ppm

Wi-Fi networks & signal intensity (2.4GHz band)/(PM10-PM2.5)
Detects Access Point n° in band 2.4Ghz and overall signal level
(from 0 to -100 dBm)



EKPCCAB4

Daikin Configurator Tool + Software

Simplified commissioning: graphical interface to configure, commission and upload system settings

Simplified commissioning

The Daikin configurator for Daikin Altherma and VRV is an advanced software solution that allows for easy system configuration and commissioning:

› Less time is required on the roof configuring the outdoor unit
› Multiple systems at different sites can be managed in exactly the same way, thus offering simplified commissioning for key accounts
› Initial settings on the outdoor unit can be easily retrieved

Simplified commissioning

Retrieve initial system settings

K.RSS

Wireless room temperature sensor

Flexible and easy installation

› Accurate temperature measurement thanks to flexible placement of the sensor
› No need for wiring
› No need to drill holes
› Ideal for refurbishment

Connection diagram Daikin indoor unit PCB (FXSQ example)

Specifications

			Wireless room temperature sensor kit (K.RSS)	
			Wireless room temperature receiver	Wireless room temperature sensor
Dimensions		mm	50 x 50	ø 75
Weight		g	40	60
Power supply			16VDC, max. 20 mA	N/A
Battery life			N/A	+/- 3 years
Battery type			N/A	3 Volt Lithium battery
Maximum range		m	10	
Operation range		°C	0~50	
Communication	Type		RF	
	Frequency	MHz	868.3	

› Room temperature is sent to the indoor unit every 90 seconds or if the temperature difference is 0.2°C or larger.

KRCS*

Wired room temperature sensor

› Accurate temperature measurement, thanks to flexible placement of the sensor
› Specific model code for each indoor unit can be found in the option tables

Specifications

Dimensions (HxW)	mm	60 x 50
Weight	g	300
Length of branch wiring	m	12

ADAPTER PCBs

Simple solutions for unique requirements
Concept and benefits

› Low cost option to satisfy simple control requirements
› Deployed on single or multiple units

			Connectable to:		
			Split	Sky Air	VRV
	**(E)KRP1B*** adapter for wiring	› Facilitates integration of auxiliary heating apparatus, humidifiers, fans, damper › Powered by and installed at the indoor unit		●	●
	**KRP2A*/KRP4A*** Wiring adapter for electrical appendices	› Remotely start and stop up to 16 indoor units (1 group) (KRP4A* via P1 P2) › Remotely start and stop up to 128 indoor units (64 groups) (KRP2A* via F1 F2) › Alarm indication/ fire shut down › Remote temperature setpoint adjustment › Cannot be used in combination with a central controller		●	●
	**SB.KRP58M2**	› Low noise and demand control option for RZAG-N* and RZASG-M* series. › Obligatory mounted plate EKMKSA2 needs to be ordered separately		●	
	**KRP58M51**	› Low noise and demand control option for RZA-D series. › Includes obligatory mounted plate EKMKSA3 › Obligatory mounting plate EKMKSA3 needs to be ordered separately		●	
	**DTA104A*** Outdoor Unit External Control Adapter	› Individual or simultaneous control of VRV system operating mode › Demand control of individual or multiple systems › Low noise option for individual or multiple systems			●
	**DCS302A52-9** Unification adapter for computerized control	› Enables unified display (operation/malfunction) and unified control (ON/OFF) from BMS system › Must be used together with Intelligent Touch Controller or intelligent Touch Manager › Cannot be combined with KRP2/4* › Can be used for all VRV indoor models			●
	**KRP928*** Interface adapter for DIII-net	› Allows integration of split units to Daikin central controls	●		
	**KRP980*** Adapter for split units without an S21 port	› Connect a wired remote control › Connect to Daikin central controls › Allow external contact	●		
	**KRP413*** Wiring adapter normal open contact / normal open pulse contact	› Switch off auto restart after power failure › Indication of operation mode / error › Remotely start /stop › Remotely change operation mode › Remotely change fan speed	●		

Some adapters require an installation box, refer to the option lists for more information

Accessories

EKRORO		› External ON/OFF or forced off › Example: door or window contact
EKRORO 3		› External ON/OFF or forced off › F1/F2 contact › Example: door or window contact
KRC19-26A		› Mechanical cool/heat selector › Allows switching over an entire system between cooling/heating/fan only › Connects to the A/B/C terminals of the unit
BRP2A81		› Cool/heat selector PCB › Required to connect KRC19-26A to a VRV IV outdoor unit

Individual and centralised controls

	BRC1D*	BRC1E*	BRC1H*	DCS301B51	DST301B51	DCS302C51	DCS601C51
Madoka Assistant app for advanced settings			●				
Electical box KJB111A	●	●	●				
Electical box KJB212A(A) (1)	●	●		●	●		
Electical box KJB311A(A)						●	
Electical box KJB411AA							●

(1) recommended as wider (more stable mounting)

Intelligent Tablet Controller - DCC601A51

		intelligent Tablet Controller		
		Options for local control	**Daikin Cloud Service options**	**Software**
Wired screen for local control	AL-CCD07-VESA-1	●	–	–
Control and monitoring package		–	●	–
Remote support and diagnostics package		–	●	–
Advise and optimisation package		–	●	–
Commissioning tool		–	–	●
Software update tool		–	–	●

Daikin Cloud Service requires a subscription. Contact your local sales representative for more information

Standard protocol interfaces - DMS502A51

		BACnet Interface
DIII-net expansion board (2 ports), connects up to 128 additional indoor units	DAM411B51	●
Digital pulse inputs (12) for PPD functionality	DAM412B51	●

Intelligent Chiller Manager

		intelligent Manager
Differential Pressure Sensor 4-20 mA 0-160 kPa	EKQDP2M016	●
Differential Pressure Sensor 4-20 mA 0-250 kPa	EKQDP2M020	●
Differential Pressure Sensor 4-20 mA 0-400 kPa	EKQDP2M040	●
Differential Pressure Sensor 4-20 mA 0-600 kPa	EKQDP2M060	●
ModBus RTU communication module	EKCM200J	●
BACnet IP communication module	EKCMBACIP	●

Intelligent Touch Manager - DCM601B51

		intelligent Manager	Daikin Cloud Service options (2)
DIII Plus Adaptor - Allows connection of additional 64 indoor units/groups. Only one adaptor can be connected (for more units, use DIII Plus Adaptor Slots)	DGE601A52	●	
DIII Plus Adaptor - Allows connection of additional 64 indoor units/groups. Up to 6 Adaptor Slots can be added to a DIII Plus Adaptor	DGE601A53		
iTM plus adapter – Allows connection of an additional 64 indoor units/groups. Up to 7 adapters can be connected	DCM601A52	●	
iTM PPD software – Allows distribution of used kWh by indoor units connected to the iTM	DCM002A51	●	
iTM HTTP interface - Allows communication to any third party controller via http interface	DCM007A51	●	
iTM Energy navigator – Energy management option	DCM008A51	●	
iTM BACnet Client option – Enables integration of third party devices to the iTM via the BACnet/IP protocol. (This is not a gateway and cannot replace DMS502A51)	DCM009A51	●	
Property Management System (PMS) interface option - Enables to connect to third party PMS systems	DCM010A51	● Oracle Opera PMS	
Monitoring package			●
Remote support and diagnostics package			●
Advise and optimisation package			●

WAGO interface options for intelligent Touch Manager

Required or optional WAGO base modules

Module type	Model code	Specifications	
24 V DC power supply	787-712	100 to 240 V AC —> 24 V DC, 2.5 A	Required
Communications unit (Bus coupler)	WGDCMCPLR2	RS-485, Max:115.2kbps, not programmable	Required
Connector (1)	750-960		Required
Terminator module	750-600		Required
Power supply module	750-613	IN: 24 V DC, OUT: 5 V DC	Optional

Supported WAGO I/0 modules

I/0 module type	Model code	Specifications	N° of contacts
Di	750-400	No-voltage contact input Contact rating: 24 V DC / 4.5 mA"	2
	750-432		4
	750-430	No-voltage contact input Contact rating: 24 V DC / 2.8 mA	8
Do	750-513/000-001	No-voltage contact output Contact rating: 230 V AC / 30 V DC, 2 A	2
	750-504	No-voltage contact output Contact rating: 24 V DC / 0.5 A	4
Ai	750-454	Rated at 4 to 20 mA: 12-bit resolution	2
	750-455		4
	750-479	Rated at –10 to 10 V: 13-bit resolution	2
	750-459	Rated at 0 to 10 V: 12-bit resolution	4
Ao	750-554	Rated at 4 to 20 mA: 12-bit resolution	2
	750-555		4
	750-560	Rated at –10 to 10 V: 10-bit resolution	2
	750-559	Rated at 0 to 10 V: 12-bit resolution	4
Thermistor	750-461/020-000	NTC20K thermistor	2
	750-461	Pt 100/RTD	2
	750-460		4
	750-461/000-003	Pt 1000/RTD	2
	750-460/000-003		4
	50-461/000-004	Ni 100/RTD	2
	750-461/000-005	Ni1000 TK6180/RTD	2
	750-460/000-005		4
Pi	750-638	Minimum pulse width: 1 ms	2

(1) This connector must be attached to a communications unit that is connected to the RS485 port (2-pin) of the iTM unit.

(2) To connect intelligent Touch Manager to the Daikin Cloud Service, the IoT gateway (EU.SB.5000072) and AC/DC converter (999175A) is needed.

Power supply

T1 = 3~, 220V, 50Hz
V1 = 1~, 220-240V, 50Hz
VE = 1~, 220-240V/220V, 50Hz/60Hz*
V3 = 1~, 230V, 50Hz
VM = 1~, 220~240V/220~230V, 50Hz/60Hz
W1 = 3N~, 400V, 50Hz
Y1 = 3~, 400V, 50Hz

* For VE power supply only 1~, 220-240V, 50Hz data is displayed in this catalogue.

Conversion table refrigerant piping

inch	mm
1/4″	6.4 mm
3/8″	9.5 mm
1/2″	12.7 mm
5/8″	15.9 mm
3/4″	19.1 mm
7/8″	22.2 mm
1 1/8″	28.5 mm
1 3/8″	34.9 mm
1 5/8″	41.3 mm
1 3/4″	44.5 mm
2″	50.8 mm
2 1/8″	54 mm
2 5/8″	66.7 mm

F-gas regulation

Any refrigeration system that contains fluorinated greenhouse gases is in scope of the F-gas regulations.
For fully/partially pre-charged equipment: contains fluorinated greenhouse gases. Actual refrigerant charge depends on the final unit construction, details can be found on the unit labels and in the notes underneath the specification tables in this catalogue.
For non pre-charged equipment (including, but not limited to racks): its functioning relies on fluorinated greenhouse gases.
The F-gas regulations do not apply to systems that contain only natural refrigerants such as propane or carbon dioxide.

Measuring conditions

Air conditioning

1) Nominal cooling capacities are based on:	
Indoor temperature	27°CDB/19°CWB
Outdoor temperature	35°CDB
Refrigerant piping length	7.5m - 8/5m VRV
Level difference	0m
2) Nominal heating capacities are based on:	
Indoor temperature	20°CDB
Outdoor temperature	7°CDB/6°CWB
Refrigerant piping length	7.5m - 8/5m VRV
Level difference	0m

Refrigeration

ZEAS	Chilling		Evaporating temp. -10°C; outdoor temp. 32°C; Suction SH10°C
	Freezing		Evaporating temp. -35°C; outdoor temp. 32°C; Suction SH10°C
Conveni-Pack	Mix Air conditioning and refrigeration operating mode		Indoor temp. 27°CDB/19°CWB; outdoor temp. 32°CDB; piping length:7.5m; level difference: 0m; refrigeration side: Evaporating temp. -10°C; outdoor temp. 32°CDB; Suction SH: 10°C
	Mix heating and refrigeration operating mode (Heating recovery 100% mode)		Indoor temp. 20°C; outdoor temp. 7°CDB,6°CWB; advertised refrigerant load (Evaporating temp. -10°C; Suction SH: 10°C); piping length:7.5m; level difference: 0m
Booster unit			Evaporating temp. -35°C; outdoor temp. 32°C; suction SH 10K; saturated temp. to discharge pressure of booster unit -10°C
CCU/SCU	Medium temperature application		Medium temperature application: Outside ambient temp. 32°C; Evaporating temp. = -10°C and 10K superheat;
	Low temperature application		Low temperature application: Outside ambient temp. 32°C; Evaporating temp. = -35°C and 20°C suction gas temperature
Zanotti	Uni-Block, Bi-Block, Wineblock	High temperature	When normally running: +10°C / +30°C
		Medium temperature	When normally running: 0°C / 30°C
		Low temperature	When normally running: -20°C / +30°C
	CU (one, twin, and more compressor(s))	Medium temperature	Outside ambient temp. 32°C; Evaporating temp. = -10°C and 20°C suction gas temperature
		Low temperature	Outside ambient temp. 32°C; Evaporating temp. = -35°C and 20°C suction gas temperature

Applied systems

Air cooled	Cooling only		Evaporator: 12°C/7°C	Ambient: 35°CDB
	Heat pump		Evaporator: 12°C/7°C	Ambient: 35°C
			Condenser: 40°C/45°C	Ambient: 7°CDB/6°CWB
Water cooled	Cooling only		Evaporator: 12°C/7°C	
			Condenser: 30°C/35°C	
	Heating only		Evaporator: 12°C/7°C	
			Condenser: 40°C/45°C	
Condenserless chiller			Evaporator: 12°C/7°C	
			Condensing temperature: 45°C / liquid temperature: 40°C	
Fan coil units	Cooling		Indoor temperature 27°CDB, 19°CWB; entering water temperature 7°C, water temperature rise 5K	
	Heating	2-pipe	Indoor temperature 20°CDB, 15°CWB; entering water temperature 45°C, water temperature drop 5K	
		4-pipe	Indoor temperature 20°CDB, 15°CWB; entering water temperature 65°C, water temperature drop 10K	
Air Handling Units			Temperature and humidity conditions: Extract air 22°C / 50%; Fresh air -10°C / 90%	

The sound pressure level is measured via a microphone at a certain distance from the unit. It is a relative value, depending on the distance and acoustic environment (for measuring conditions: please refer to the technical databooks). The sound power level is an absolute value indicating the "power" which a sound source generates. For more detailed information please consult our technical databooks.

Notes