

Control systems



**Controls and Accessories****180****CS Net Web****188****CS Net Manager****190****Building Automation****191**








Control systems and accessories

Controls and Accessories










Remote Controllers

CODE	PC LH3A*	PC LH3B*	PC ARH
	Remote Controller only without receiver 	Remote Controller only without receiver for RPK, RCI_FSN3 and RPC_FSN3 	
Type	Infra Red Remote Controller	Infra Red Remote Controller	Compact type wired remote controller
Timer Program	On / Off Timer up to 24 Hours	On / Off Timer up to 24 Hours	Timer-less
Special features	Standard wireless functions	Standard wireless functions	Simplified standard functions type for hotel application
Additional functions	Not provided	SH speed control	Possibility to enable and set a number of functions

CODE	PC-ART	PC-ARF
		
Type	Wired Remote Control Panel	Wired Remote Control Panel with Backlit Display
Timer Program	7-Day Timer	7-Day Timer
Special features	Diagnosis, locking and a variety of special functions.	Diagnosis, mode locking functions, description of available functions on multiple language text and a variety of special functions
Additional functions	Possibility to enable and set a number of additional functions	Possibility to enable and set a number of additional functions

Receiver Models



CODE	PC ALHC	PC ALHN	PC ALHD	PC-ALHP1
				
Description	Complete corner kit for installation on P-N23WAM panel of 4-WAY MINI RCIM cassette units	Complete corner kit for installation on P-N23NA panel of 4-WAY RCI Ei cassette units	Complete kit for installation on P-N23(46)DNA panel of 2-WAY RCD cassette units	Receiver Kit for installation on high efficiency RPC-FSN3 ceiling unit
Place of installation	Panel corner	Panel corner	In the panel	On the unit



CODE	PC ALHZ	PC ALH3	PC ALHZF
			
Description	Receiver kit for remote installation for all units, excluding RPK-FSN(H)3H RCI-FSN3	Complete corner kit for installation on P-AP160NA1 or P-AP160NAE panels of 4-WAY RCI-FSN3 cassette units	Receiver kit for remote installation for units: RPK-FSN(H)3M RCI-FSN3
Place of installation	Wall	Panel corner	Einfache, kabellose Bedienung Farbe: Grauweiß, ähnlich RAL 9002

* PC LH3A and PC LH3B remote controls are not interchangeable.

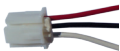






Centralised Controllers




CODE	PSC A64GT	PSC A64S
		
Type	Centralised Touch Screen Control	Standard Centralised Control
Number of controlled indoor units	Control up to 64 indoor units single or in groups up to 160 indoor units (H-Link II) with possibility to connect up to 8 of them on the same Bus H-link	Control up to 64 indoor units single or in groups up to 160 indoor units (H-Link II) with possibility to connect up to 8 of them on the same Bus H-link
Special features	Possibility to enable and set many additional features with Daily Weekly Timer for each indoor unit	Possibility to enable and set a number of additional functions without Timer

CODE	PSC-A16RS	PSC-A1T
		
Type	ON-OFF type key Centralised Control	7-Day Timer
Number of controlled indoor units	Control up to 16 indoor units either single or in groups with possibility to connect up to 8 of them on the same Bus H-link	Timer Programmer for PSC A64S Controller (one timer only per central controller)
Special features	On/Off or Anomaly status display	Possibility to pre-set 2 types of Timer A or B based e.g. on the season, Summer or Winter

Accessories for Indoor Units

CODE	PCC 1A	THM R2AE	SOR-NEP
			nd
Description	Connector to connect optional inputs and outputs (5 pc. package)	Remote ambient temperature sensor (8 m cables)	PKit motion sensor for high efficiency ceiling unit RPC-FSN3 (for installation on the unit)

CODE	P N23NA	P N23DNA	P N46DNA
			
Description	Panel / Grille for 4-way RCI cassette series i	Panel / Grille for 2-way RCD cassette from 1.0 to 3.0HP	Panel / Grille for 2-way RCD cassette from 4.0 to 5.0HP

CODE	P N23WAM	P AP160NA1	P AP160NAE
			
Description	Panel / Grille for 4-way RCIM 60 x 60 cassette	Panel / Grille for 4-way RCI high efficiency cassette and series k	Panel / Grille for 4-way RCI high efficiency cassette and series k

Note Please contact the head office or area agency regarding compatibility of the various products and prices





Control systems and accessories

Controls and Accessories


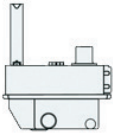
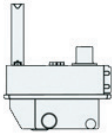
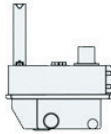
CODE	OACI-160K2	OACI-232	OACI-232E
			
Description	Outside air input kit. Up to 20% of nominal flow of the RCI high efficiency indoor unit	Outside air input kit. Up to 20% of nominal flow of the RCI SERIES i indoor unit	Outside air input kit. Up to 20% of nominal flow of the RCI SERIES k indoor unit

CODE	PD-75A	PD-75	TKCI-160K	TKCI-232
				
Description	Outside air connection kit for high efficiency RCI unit	Outside air connection kit for RCI SERIES i and k RCIM unit	Accessory for connecting outside air input ducts for high efficiency RCI unit	Accessory for connecting outside air input ducts for RCI SERIES i and k RCIM unit

CODE	PDF-71C1	PDF-160C1	PDF-23C3	PDF-46C3
				
Description	Flange for connecting outside air input ducts for high efficiency RCI unit for power up to 3HP	Flange for connecting outside air input ducts for high efficiency RCI unit for power over 3HP	Flange for connecting outside air input ducts for RCI SERIES i and k unit for power up to 3HP	Flange for connecting outside air input ducts for RCI SERIES i and k unit for power over 3HP

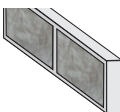
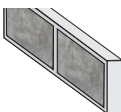
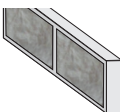

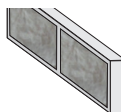
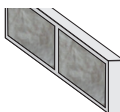
CODE	PI-160LS1	PI-23LS5
		
Description	Outside air output obstruction kit for high efficiency RCI unit	Outside air output obstruction kit for RCI SERIES i and k unit





CODE	DU-M1E	DUPC-63K1	DUPC-71K1	DUPC-160K1
				
Description	Condensate Drain Pump Kit only for RPIM type indoor units	Condensate Drain Pump Kit for high efficiency Ceiling units For powers up to 2.5HP	Condensate Drain Pump Kit for high efficiency Ceiling units For powers equal to 3HP	Condensate Drain Pump Kit for high efficiency Ceiling units For powers over 3HP

Duct Attenuator and auxiliary Filters for KPI

CODE	STL 30-200-L600	STL 30-250-L600	STL 30-300-L600	STL 30-355-L600	STL 30-450-L600
					
Duct Silencers for KPI Recovery Unit	KPI-502	KPI-802	KPI-1002	KPI-1502 & KPI-2002	KPI-3002H2E
Features	Average silencing of approximately 5dB(A) in the output duct is obtained.				

CODE	HEF 252	HEF 502	HEF 802	HEF 1002	HEF 1502	HEF 2002
						
Duct Silencers for KPI Recovery Unit	KPI-252E3E	KPI-502(E/H/X)3E	KPI-802(E/H/X)3E	KPI-1002(E/H/X)3E	KPI-1502(E/H)3E	KPI-2002(E/H)3E
Features	Auxiliary additional filter for KPI Recovery Unit Features					

CH Unit for heat recovery systems

CODE	CH-6.0N1	CH-10.0N1
		
Timer Funktionen	Control of up to 7 indoor units for overall nominal power \leq 6HP	Control of up to 8 indoor units for overall nominal power $>$ 6 and \leq 10 HP





Controls and Accessories

JOINTS

CODE	Description	UTOPIA				VRF			
		ES	RASC	STANDARD	PREMIUM	MINI-SIDE FLOW	FSXN	FSXNH	FSXN1
TE-03N1	3HP branch joint kit	X		X					
TE-04N1	4HP branch joint kit	X		X					
TE-56N1	5-6HP branch joint kit	X	X	X					
TE-08N	8HP branch joint kit	X		X					
TE-10N	10-12HP branch joint kit		X	X					
TRE-46N1	3 branch coupling header kit 4-5-6HP	X		X					
TRE-06N	3 branch coupling header kit 6HP		X						
TRE-812N1	3 branch coupling header kit 8-10-12HP		X	X					
TRE-810N	3 branch coupling header kit 8-10HP	X	X						
QE-810N	4 branch coupling header kit 8-10HP		X						
QE-812N1	4 branch coupling header kit 8-10-12HP			X					
TW-22AN	2-2.5HP branch joint kit				X				
TW-52AN	3-6HP branch joint kit				X				
TW-102AN	8-10-12HP branch joint kit				X				
TG-53AN	3 branch coupling header kit 4-5-6HP				X				
TG-103AN	3 branch coupling header kit 8-10-12HP				X				
E-102SN3	Branch joint kit up to 12HP		X	X	X	X	X	X	X
E-162SN3	Branch joint kit from 12 to 18HP		X	X	X	X	X	X	X
E-242SN3	Branch joint kit from 18 to 26HP						X	X	X
E-302SN3	Branch joint kit from 26 to 54HP						X	X	X
MH-84AN	4 branch coupling header kit up to 8HP					X	X	X	X
MH-108AN	8 branch coupling header kit up to 10HP					X	X	X	X
MC-20AN	Joint kit for condensing units from 20 to 24HP						X	X	
MC-21AN	Joint kit for condensing units from 26 to 36HP						X	X	
MC-30AN	Joint kit for condensing units from 38 to 54HP						X	X	
MC-20AN1	Joint kit for condensing units from 14 to 24HP								X
MC 30AN1	Joint kit for condensing units from 26 to 36HP								X
3-pipe combinations - Simultaneous hot and cold									
E-52XN3	Branch joint kit up to 6HP						X	X	x
E-102XN3	Branch joint kit from 6 to 12HP						X	X	x
E-162XN3	Branch joint kit from 12 to 18HP						X	X	x
E-202XN3	Branch joint kit from 18 to 22HP						X	X	x
E-242XN3	Branch joint kit from 22 to 26HP						X	X	x
E-322XN3	Branch joint kit from 26 to 54HP						X	X	x
MH-108XN	8 branch coupling header kit up to 10HP						X	X	
MC-20XN	Joint kit for condensing units from 20 to 24HP						X	X	
MC-21XN	Joint kit for condensing units from 26 to 36HP						X	X	
MC-30XN	Joint kit for condensing units from 38 to 54HP						X	X	
MC-20XN1	Joint kit for condensing units from 14 to 24HP								x
MC-30XN1	Joint kit for condensing units from 26 to 36HP								x



ACCESSORIES FOR OUTDOOR UNITS

	DBS 12L		DBS 26		DBS TP10A	
					<div>Image</div> <div>N.D.</div>	
Product range	MODEL	QUANTITY	MODEL	QUANTITY	MODEL	QUANTITY
UTOPIA ES	RAS 2-2.5HVRN2	1	RAS 4-6H(V)RNS(2/3)E	1	-	-
	RAS 3HVRNS3	1	RAS 8-10HRNSE	1	-	-
UTOPIA IVX	RAS 2-2.5 HVNP	1	RAS 4-6HVNC	1	-	-
	RAS 3HVNC	1	RAS 8-10HVNC	2	-	-
	-	-	RAS 12HVNC	2	-	-
IVX PREMIUM	-	-	RAS 3HVNP	1	-	-
	-	-	RAS 4-6H(V)NPE	2	-	-
MINI SET FREE	-	-	RAS 4-6FS(V/Y)N2E	1	-	-
SET FREE SIDE FLOW	-	-	RAS 8-12FSNM	2	-	-
SET FREE FSXN	-	-	-	-	RAS 8-18FSXN	1
	-	-	-	-	RAS 20-36FSXN	2
	-	-	-	-	RAS 38-54FSXN	3
SET FREE FSXNH (high efficiency)	-	-	-	-	RAS 5-12FSXNH	1
	-	-	-	-	RAS 14-24FSXNH	2
	-	-	-	-	RAS 26-36FSXNH	3



Control systems and accessories

CS Net Web

CS NET WEB is a centralised independent control device for simultaneous adjustment of up to 160 indoor units and 64 outdoor units connected to the communication bus H-LINK.

Control expansion allows up to 640 indoor units to be connected and connection of 4 CS NET WEB units.

The main features are:

- centralised independent control up to 640 indoor units (4 connected devices)
- remote control via WEB/LAN network
- JAVA technology
- Automatic updates
- new graphic icons
- total control over system functionalities
- setting inhibitions/restrictions
- timer programming up to 4 years
- calculation of energy consumption
- archive of operation data log and anomalies (black box)
- Building layout editor
- RCS web
- Multiple access by password
- Built-in MOD BUS interface
- FIDELIO Interface
- monitoring all operating parameters
- integrated e-mail ALERT
- Setting configuration and transfer when the operator is
- ON-SITE
 - Free adaptation of unit names
 - Modification of connection parameters of the CS NET WEB to the LAN Network
 - Remote software updates
 - Timer functions programmable for "day/night" operation, early switch-on at different temperatures

GRAPHICAL DISPLAY

The user may view the system by showing it in two different display ways depending on needs:

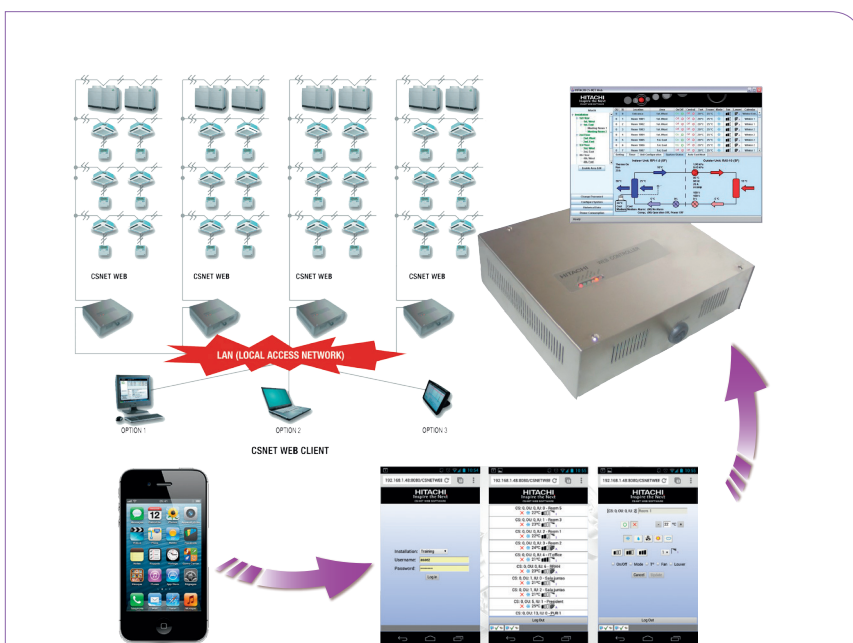
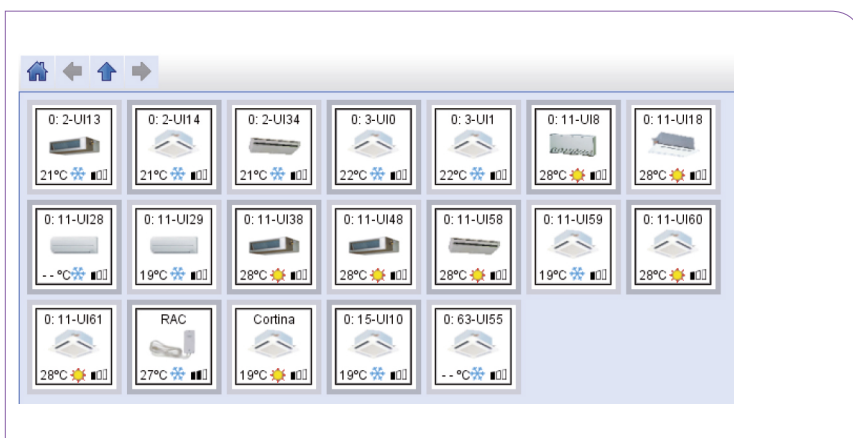
- display by graphical icons
- sequential display

DIFFERENTIATED PASSWORDS

There are several levels of password access to CS NET WEB; these may be adjusted and calibrated depending on the type of user.

WEB/LAN CONNECTION

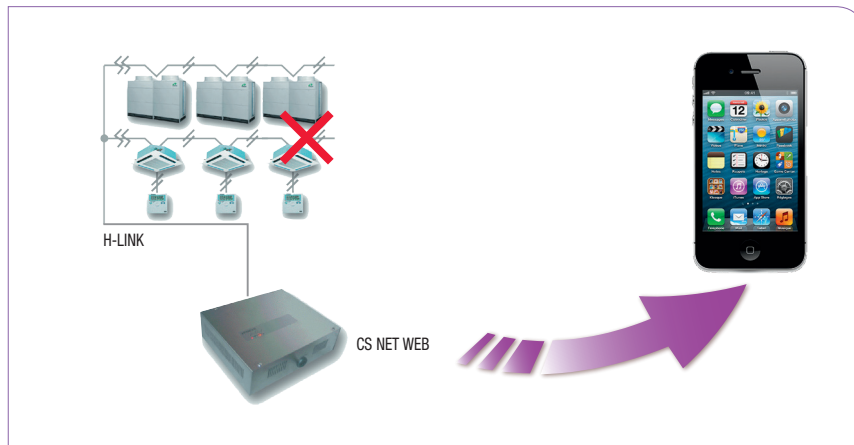
CS NET WEB may be connected to the LAN network or Internet (by means of an ADSL router) also making it possible to control and manage by SMART PHONE or PC.





INTEGRATED E-MAIL ALERT

The **@ ALERT** service lets you program at will emails to be sent to 5 different addresses, with sending frequency within the 1 ÷ 24 hour range.



FIDELIO GATEWAY

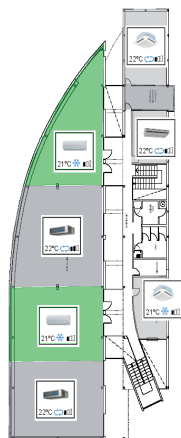
Each indoor unit is controlled via the graphical interface typical of hotel controllers, supporting the main features of:

- Unit ON/OFF
- Reading room occupancy condition
- Temperature setting
- Fan speed control
- Local or central control

Period	From	to	Condition	A/S	Modal	Temp.	Fan	Contr. PC
1	01-Jan	31-Jan	←	○	☀	22 °C		✓
			→	×	☼	21 °C		✗
2	01-Jan	31-Dec	←	○	☀	22 °C		✓
			→	×	☼	21 °C		✗

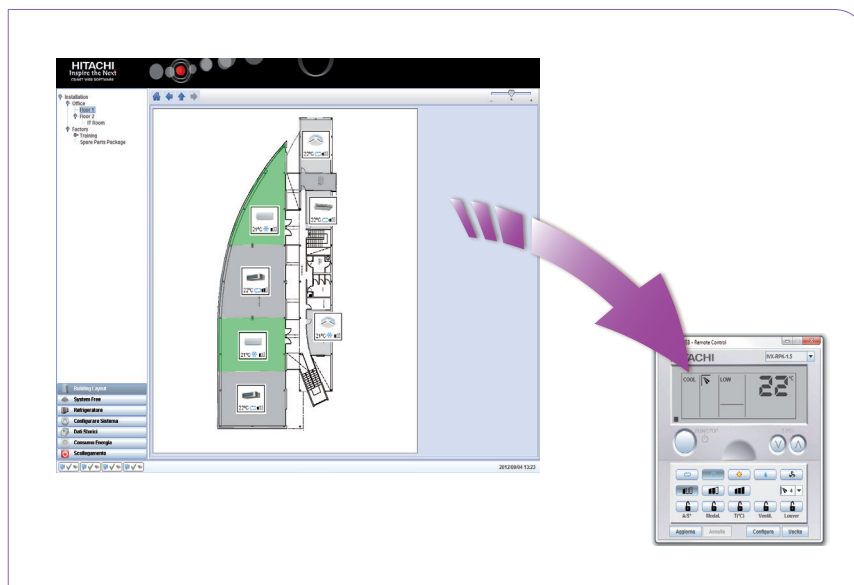
BUILDING LAYOUT EDITOR

It is possible to create a detailed image of the rooms allowing users to immediately view the condition of each indoor unit.



VIRTUAL REMOTE CONTROL

Just click on the image of the unit to automatically display the virtual control. The settings of each unit may be modified with your PC by acting on the control's virtual image. Each PC is associated with the IP address of the relevant **RCS web**.





Control systems and accessories

CS Net Web

CONNECTION WITH ELECTRONIC MULTIMETER

The connection with a Mod-Bus electrical meter lets you export data, display them on the CS NET WEB and use them to calculate energy consumption.



ENERGY CONSUMPTION: THE TWO LOGICS

Using the CSNET WEB, together with the latest breed of electronic meters, lets you account and export data in electronic format.

Consumption identification is compatible also with applications where differentiated pricing is in force (two-part tariff). The application lets you set the different tariffs for the different time bands.

Energy Consumption		Configuration				
UE	UI	Description	% UE	% System	Energy	Cost
0	0	Room 5	2,93	0,4	19,88 kW	1,55 €
0	1	Room 3	17,84	2,42	121,13 kW	9,45 €
0	2	Room 1	16,45	2,23	111,74 kW	8,72 €
0	3	Room 2	2,93	0,4	19,88 kW	1,55 €

Input consumption

☐ Use power meter devices to obtain data

☒ Enter system consumption in the selected period

Initial reading Final reading

Currency

Fees:

From (Day)	To (Day)	Day	From (Time)	To (Time)	Cost
01-Jan	01-Feb	Every	00	24	0.078
02-Feb	31-Dec	Every	00	24	0.05

TIMER

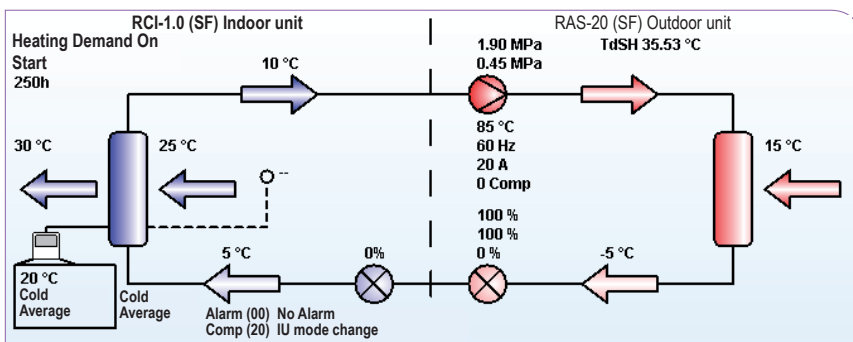
The flexibility of the new Timer lets you memorise settings independently for each unit and for each day, extending the function up to 4 years of programming. Each indoor unit may be assigned customised Timers and distinctive operation degrees may be defined.

Time	On...	Mode	Temp.	Fan	On...	Mode	Temp.	Fan
05:16	<input checked="" type="radio"/>		22 °C		<input checked="" type="radio"/>		22 °C	
06:16	<input checked="" type="radio"/>		22 °C		<input type="radio"/>		22 °C	
13:52	<input checked="" type="radio"/>		22 °C		<input type="radio"/>		22 °C	
17:52	<input checked="" type="radio"/>		22 °C		<input type="radio"/>		22 °C	

Functions that can be blocked

SYSTEM CONTROL

The menu to read parameters of all units can be accessed also from a remote station. This makes support and maintenance operations quick and easy.



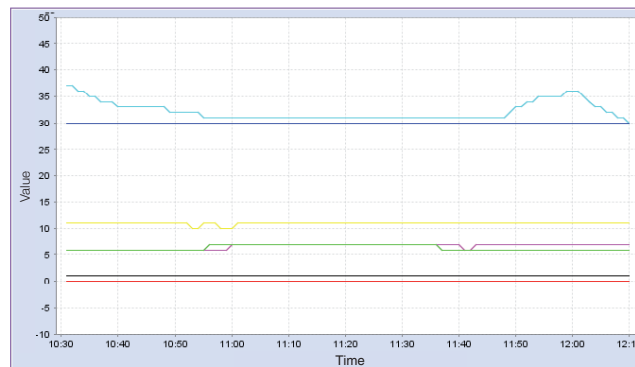
Control systems and accessories



BLACK BOX

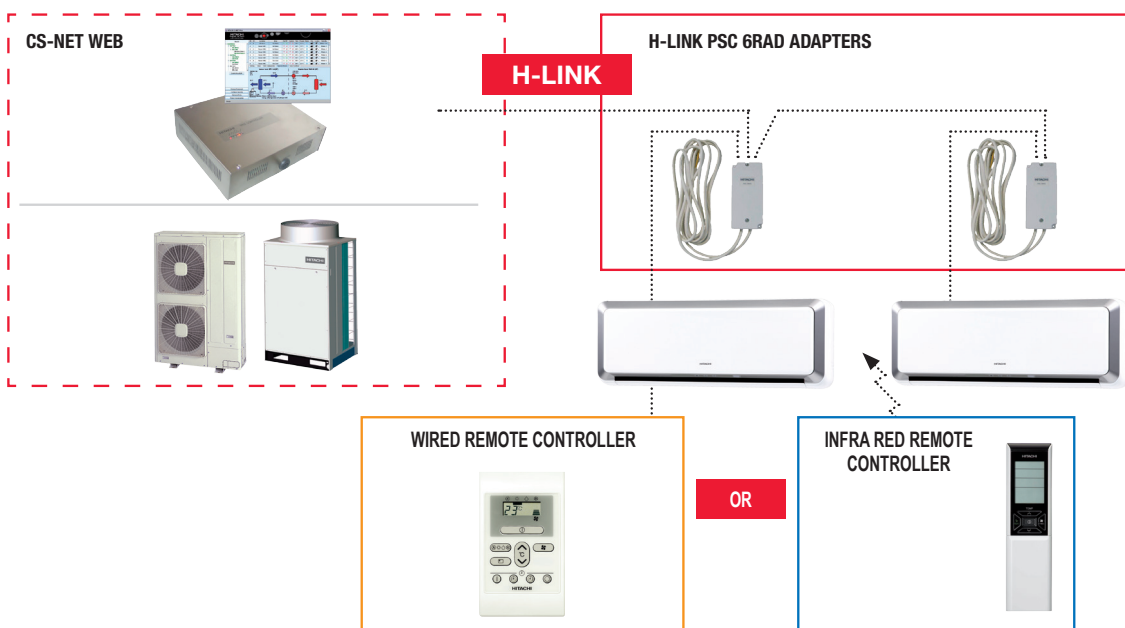
At any time you may read, even remotely, the log data of the system complete with operation status and possible anomalies/alarms occurred over time.

All operation parameters are always available for total control of the air conditioning system and may be either in number or graphical format.



RESIDENTIAL SYSTEM INTEGRATION

The PSC-6RAD accessory makes it possible to integrate in the centralised CS NET WEB control also HITACHI residential MONO and MULTI SPLIT systems.



CODE	PSC-A160 WEB 1	TS 002
		Optional 17" touch screen panel. All CS NET WEB functions may be controlled directly on the monitor.
Type	Centralised control for PC	Touchscreen Panel
Number of indoor units that may be controlled	Control of up to 160 individual indoor units and up to 64 outdoor units (H-Link II)	To be used with Cs Net web instead of a Normal PC (the CS Net web interface must be installed)
Special features	Control of all units Weekly Daily Timer; monitoring each individual unit's consumption in %, Connection via Lan or Internet, E-mail anomaly notification	17" Touch Screen Monitor for wall Installation or table top

Note Please contact the head office or area agency regarding compatibility of the various products and prices



Control systems and accessories

CS Net Manager

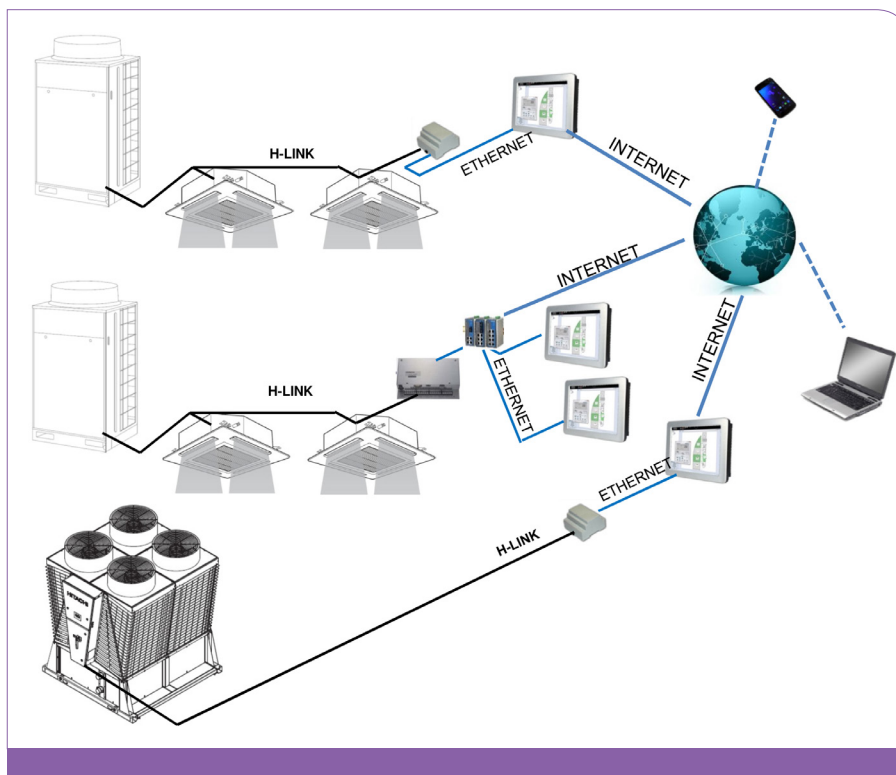
The CS NET platform is integrated with a new Touch Screen supervision and control system which adopts all typical flexible features of its forerunner CS NET WEB and lets you control up to 1280 indoor units. An industrial-size Hard Disk, 50 GB maximum capacity, adequately tackles even the most challenging demands. Interaction with external devices is assured thanks to integrated Ethernet, USB and serial RS 485 ports.

General features:

- Touch Screen: 10 or 17 inches
- To control up to 1280 indoor units
- Ethernet Port
- USB Port
- Serial RS 485 port (available via HC-A64NET)
- HD 50 GB (max)
- Remote control via WEB/LAN network

The main features:

- Building Layout
- Integrated graphical icons
- Timer / calendar function management
- Energy consumption functions



CODE	CS NET MANAGER 10"
CODE	CS NET MANAGER 17"
CODE	CHC A64 NET



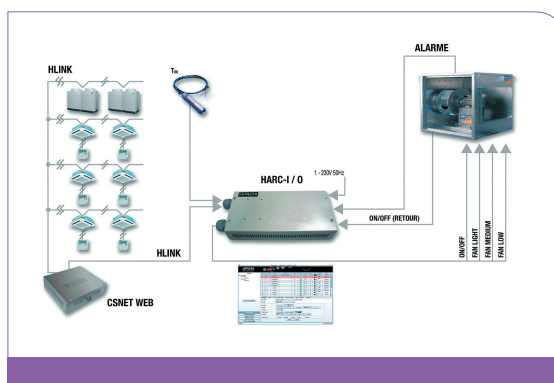
Building automation

INTERFACES

HITACHI offers a wide range of control systems, providing the user with complete supervision flexibility of conditioning systems to meet any need, taking into account factors such as room size, number of people and climate.

HARC - I/O

Integration of external air conditioning systems in the bus H-Link. To incorporate non HITACHI units (fans, air treatment units, etc.) into the H-LINK system. HARC I/O units can adjust up to 5 signals such as fan speed control, off, on, etc.



CODE HARC I/O

PSC 5HR Relay H-Link

Allows increase of maximum length of the H-Link bus up to 5000 m using up to four PSC 5HR units.

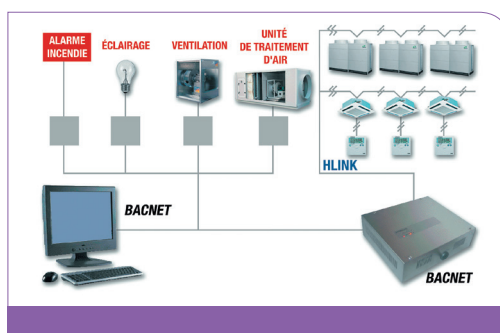


CODE PSC 5HR

Optional BMS interfaces are available to connect the H-LINK bus of HITACHI air conditioners, using various standard communication protocols such as ModBus, BacNet, KNX and Lon Works.

HC A64BNP

Integration with intelligent control installations (BMS - Building Management System). Gateway interface to BAC NET BMS systems via TCP IP connection and control over up to 64 indoor units.



CODE HC A64BNP

Note Please contact the head office or area agency regarding compatibility of the various products and prices

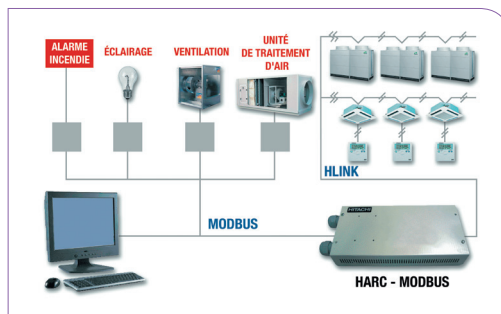


Control systems and accessories

Building automation

MODBUS INTERFACE STAND ALONE

Integration with intelligent control installations (BMS - Building Management System).
Gate-way interface with MODBUS systems via serial RS485 connection



HC-A8MB **NEW**

Power Supply 230V, 50 Hz
Connection ports: RS 485 serial; Ethernet port TCP ModBus
Control of 8 Indoor Units
Installable on DIN 35mm guide
USB port for PC configuration

HC-A32MB

Power Supply 230V, 50 Hz
Connection ports: RS 485 serial; Ethernet port TCP ModBus
Control of 32 Indoor Units
Installable on DIN 35mm guide
USB port for PC configuration
Possibility to install up to 8 Harc Mod Bus on the same H-Link.

HC-A64MB **NEW**

Power Supply: 230V, 50 Hz
Connection ports: RS 485 serial; Ethernet port TCP ModBus
Control of 64 Indoor Units
Installable on DIN 35mm guide
USB port for PC configuration

CODE

HC-A8MB

CODE

HC-A32MB

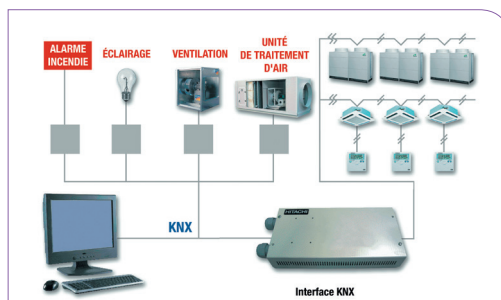
CODE

HC-A64MB

KONNEX HC-A16KNX STAND ALONE INTERFACE

Integration with intelligent control installations (BMS - Building Management System).
Gate-way interface with KONNEX systems via twisted pair Konnex connection.
Control of up to 16 indoor units with 18 variables each and up to 16 different refrigerant cycles.

Possibility to install up to 8 Harc Konnex on the same H-Link.



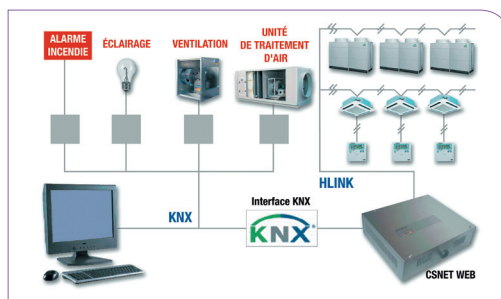
CODE

HC A16KNX

KONNEX INTERFACE

Integration with intelligent control installations (BMS - Building Management System).
Communication via KNX protocol with control up to 128 indoor units and 18 variables ea.
Gate-way interface with KONNEX systems via Lan connection to CS NET WEB system.

This is an accessory complementing CS Net web.



CODE

KNX 001

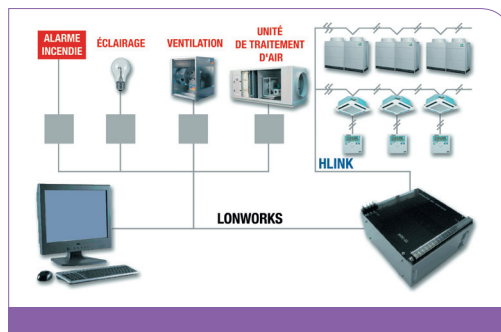


LON WORKS INTERFACE HARC-BXE(A-B)

Thanks to this device the Utopia and Set Free air conditioning systems can be integrated within a BMS - Building Management System which uses the communication protocol Lon Works®.

The use of HARC BXE lets you control up to:

- Version (A) up to 64 indoor units with 8 variable management
- Version (B) up to 32 indoor units with 16 variable management



CODE

HARC – BXE(A) (B)