

CEDIA[®] MEMBER



Technical manual

Version BETA

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www.astrum.eu/vface.html

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VFACE BASIC



VFACE TOUCH





GENERAL INFORMATION

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This manual will include all information and techniques about product, for installing and configuration. We reserve the right to make changes to the manual without prior notification.

You are allowed to make a single copy for backup purpose.

Please read and be familiar with instruction before getting started and keep the manual for later use.

You are always welcome to inform use of errors or make suggestions for improving the program.

Manual and the Software are protected by copyright. All rights are reserved.

Sym	Symbols and Notifications				
	Caution! Important points need to take into account while configuration.				
Q	Hint Additional notes and information.				
""	Double quotes: Functions or step which user must perform.				
Italic	Italic: Description for objects and pictures.				
BOLD	Bold: Illustrates names of buttons, menus or elements.				





Warning & Safety Instructions

- Installation and configuration should be done by only qualified personnel.
- You can take support from your dealer or technical representative in your region for installing a device.

• All electrical execution must be performed by a technician and with accordance of the country legislation following the instructions in the Technical Manual.

• Make sure that all cables are secure, that recommended cables are used and that no external forces act on Terminal connections or cables.

• VFace mentioned for indoor use only. Disconnect power and all bus communication cable from VFACE while installation and mounting.

• Do not apply **AC power** to the VFACE BASIC / VFACE TOUCH.

• Based on modular structure different add-on modules are manufactured for each brand, do not try to use it for other brands. This may cause damage to add-on module and device itself.





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Technical specification

Hardware Information's

Power Supply:	12 VDC
Display:	Basic – None
	Touch – 7" with capacitive touchscreen
Standard Interface:	VRF port (1x)
	LAN RJ45 (1x) GbE Interface
	USB 2.0 (1x)
	Digital GPIO (2x) Input
Optional Interface:	Additional VRF port (1x) any brand
	RS232 / RS485 (1x) two-in-one module
	KNX (1x) TP
Reset Button:	Hardware button on the back side of the case
Housing Type:	Aluminum colored black
	Protection grade IP 20
Working Humidity:	5% - 90% at 25°C
Working Temperature:	-10°C - +35°C





Software Information's

Standard Technologies:	Built-in web server
	Internet Upgradable
	Customizable web interface
Connectivity:	ASCII TCP/IP (Custom protocol)
	Modbus TCP
	Modbus RTU RS232 / RS485 (Optional)
	KNX (Optional)
	Web server implementation (via SDK)
VRF Control:	Full indoor unit control
	Monitor indoor and Outdoor units
	System diagnostic
Controllable elements:	On/Off status
	Set temperature
	Work mode
	Room temperature read only
	Fan speed
	Swing and diagnostic (regarding brand)
	Outdoor data read only (regarding brand)
Web UI Functionality:	Name and group indoor / outdoor units
	Define user rights
	Scheduling indoors
	Record indoor activity logs (optional)
	System logs for diagnostic
Timer / Scheduling:	Indoor full control
	Weekly or one-time commands
	Lock indoor units
	Time interval commands
User Interface:	Web/Html5 (All operating systems)
	Mobile app support (iOS / Android)
Browser Compatibility:	Chrome / Firefox / Safari
Mobile App:	Apple iOS / Google Android
Client Amount:	Unlimited clients (up to 16 parallel connections)





Setup and Maintenance Configuration Interface: Online / Offline through web interface Back / restore of the project Search units Unit list Select BMS / HA connectivity Setup and Maintenance: Network Date / Time Language support (soon) Selection of graphical elements Software Update Software License Other Functions: Emulator (Simulate VRF System) Watchdog (Protect system against crash) Rotate screen Inputs: Emergency Input (Closes all VRF indoor units) Search inputs (Start to scan VRF Bus)





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Supported Brands

CHIGO AIR-CONDITIONING	DAIKIN
HITACHI	LG
	MITSUBISHI HEAVY INDUSTRIES, LTD.
Midea®	Panasonic
S A M S U N G	SANYO
TOSHIBA	





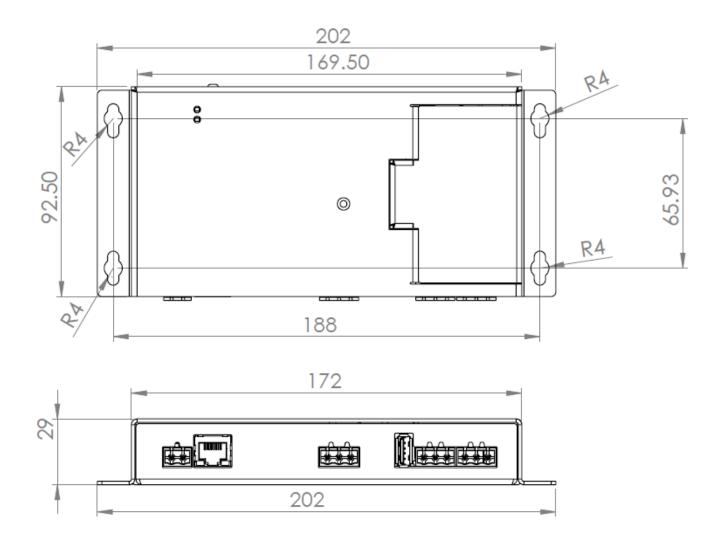
VFACE Functions & Overview 2. vrace COLOR COLORIDA . . . Mobile Control LAN Port 2 KNX KNX VFACE Port 2 Modbus Web Interface Modbus RTU <u>ایت</u> Port 1 **Touch Panels** VRV/VRF VRV/VRF odbus • Search Input • Emergency Input







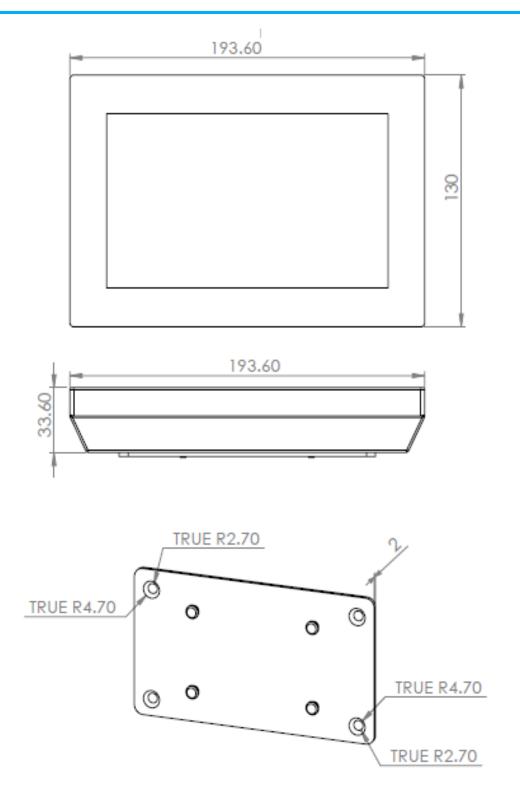
Dimension of VFACE BASIC







Dimension of VFACE TOUCH

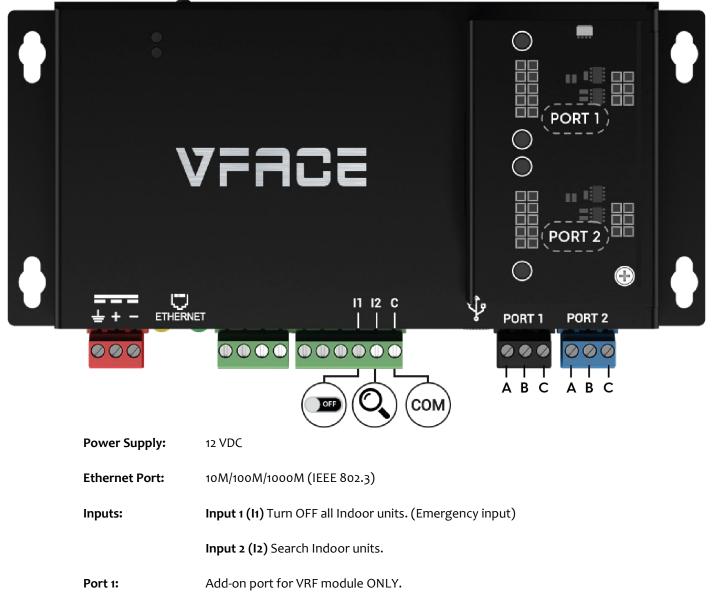








Connections



Port 2: Add-on port for BMS(Modbus/KNX) or VRF modules.





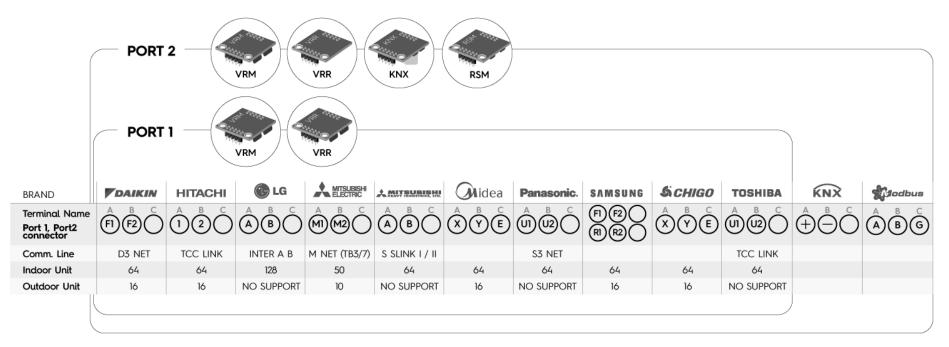
VFACE is based on modular structure, on the rear side of VFACE Touch / VFACE Basic under the cover you can see two add-on port.

By plugging specific add-on modules to those ports various combination of connectivity can be provided. Please check the table below.

PORT 1	PORT 2	OPERATION MODE
VRV/VRF	-	64 Indoor Control + Modbus TCP/IP
VRV/VRF	Modbus	64 Indoor Control + Modbus RTU
VRV/VRF	KNX	64 Indoor Control + KNX + Modbus TCP/IP
VRV/VRF	VRV/VRF	128 Indoor Control + Modbus TCP/IP

Outdoor Unit Connections

Each brand of HVAC has different communication terminals on outdoor unit. Please check below table for terminals connections.







Introduction

VFACE is a standalone interface for VRV/VRF systems which also let you easily integrate to Home Automation and Building Management Systems. VFACE supports various brands and provides end-users with full control of all indoor units enabling them with access to VRV/VRF's various functionalities including diagnostic.

VFACE is a plug and play device when installing device HVAC installers will not need to worry anymore about the complexity involved in various gateways and with 7" VFACE Touch Panel no need computer to setup.

VFACE has an embedded web server which hosts a responsive web page that means various connectivity options such as PC, Tablet or Mobile and easy configuration via internet. VFACE also enables VRF installers to access all parameters required for diagnostic and service purposes.

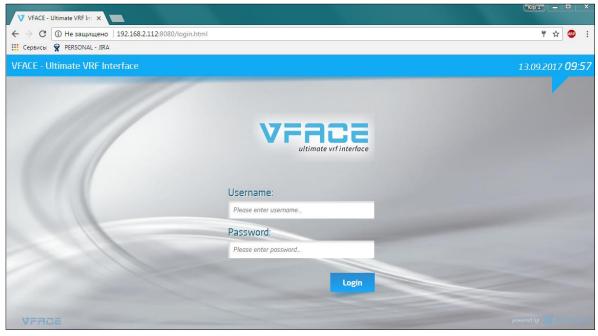
Access to the System

Access to the system realizes through entering individual IP Address and Port number 8080 of the device to the Web Browser.

- Default IP Address of device is 192.168.2.100 and Default Port number is 8080.
- From VFACE Touch you can obtain IP Address through "Setting/Parameters/Network" page.

• In the case when DHCP server is set. You will need to find out which IP Address did device take through Scanning the Network. After finding IP address enter it to Browser.

• Recommended web browsers: Google Chrome / Safari / Firefox.



View from browser: Login page





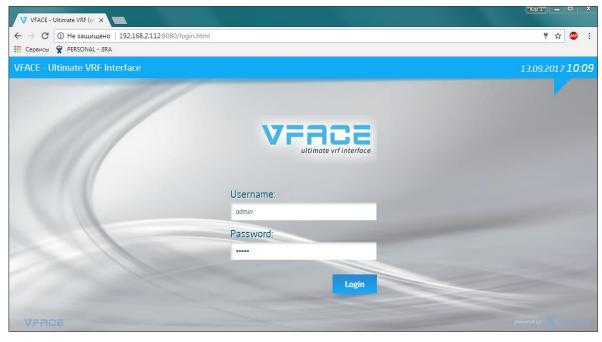
STRUM

Types of the access:

- Local access: IP address of device inside local network is required.
- Remote access: You will need to redirect Local IP Address of the VFCAE to the public IP Address, through port forwarding.

Authorization to the system originates through two types of sessions:

Username	Password	Description
admin	admin	Intended for integrators, has unlimited authorization to settings.
user	user	Intended for end-use can monitor and control.
guest	guest	Intended for end-use can monitor and control.



View from browser: Login page



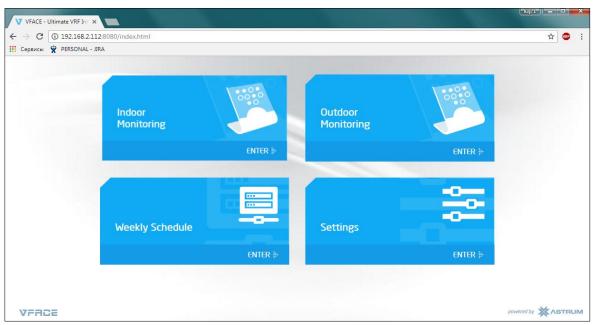
Web Interface of both VFACE BASIC and VFACE TOUCH are identical.





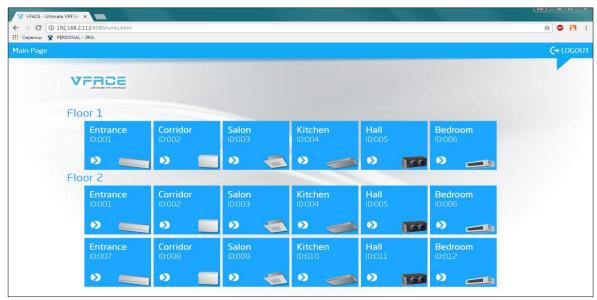
RUM

TECHNOLOGY



View from browser: Main page of Admin client

- Indoor Monitoring: Full control and monitoring of all VRV/VRF indoor units.
- Outdoor Monitoring: Diagnostic information of the VRV/VRF outdoor units.
- Weekly Schedule: Creating schedules, rules for each indoor unit or for group, depending on time and season.
- Settings: Includes all parameters and configuration of device.



View from browser: Main page of User client



Authorization of User and Guest are limited, they can only monitor and control unit, but can't make a change.





Indoor Monitoring

Provide monitoring and control of all Visible Indoor units.

Sections	Units	Section 🔲 All Units	Control
>0	On Off Bedroom Corridor	Off Off Entrance Hall	Bedroom • ON
			Auto 🕂
Floor 1		S16° S16° S16° S16° S16° S16° S16° S16°	₩ Heat 16°C
1	Fault On Kitchen Salon		Or Dry O
			Fan Swing
Floor 2	Auto S 16° Auto	S 16° R 20°	
			Fan Speed
			AUTO LOW MEDIUM HIG
			APPLY
			Channel:CHANNEL_1 Schedule:NO Locked:NO
			Protection:PA T2:20 T2B:21

- Sections: Indoor units can be divided into sections. Sections can be floor or parts of building according to the project.
- All units: Apply configuration to all units in whole sections.
- Section: Apply configuration to all units inside current section.
- Control:

On/Off: Enable or Disables the indoor unit.

Mode: Select the mode of indoor unit.

Fan Speed: Select the intensity of Fan speed.

Swing: Select the swing state.

Set Temperature: You can set the temperature by clicking the (+) and (-) buttons.

- APPLY: Save and apply each configuration by clicking Apply button.
- Info bar: Diagnostic information about indoor unit.



Same procedure can be applied on other sections with the same way, configuration and managing Sections and Units will be explained in upcoming chapters of manual.

VFACE



Outdoor Monitoring

This section provides diagnostic information about the Outdoor units of VRV/VRF systems. Following information is just for monitoring, it's not allowed to make any changes.



View from browser: Outdoor Monitoring

By the clicking Outdoor Unit on the Control bar you will be able to see all information about unit.



Settings

TECHNOLOGY

ultimate vrf interface			English
	Settings		Import Export
	Port-1 Parameters		
Jsers	Port Type:	VRF	
Define Units	Choose Brand:	Daikin	
veekly Schedule	Port-2 Parameters		
(NX Addresses	Port Type:	ModBus ~	
nvoice	Choose Baudrate:	9600 ~	
	Туре:	RS485 ~	
System Log			
	IP Adress:	192.168.2.88	
	Gateway:	192.168.2.1	
	Subnet Mask:	255.255.0.0	
	DNS:	8.8.8.8	

View from browser: Settings page

VFACE

Port-1 Parameters

Port Type: Select type of protocol (VRF / Modbus / KNX)

Select Brand: Select brand of VRV/VRF from available list

Port-2 Parameters

Port Type: Choose type of protocol (VRF / Modbus / KNX)

Channel-2 Parameters		
Channel Type:	ModBus	~
Choose Baudrate:	9600	\sim

If you select Modbus as a channel type you will have set Baud rate menu to set.



• Channel- 1 or Port 1 is suggested to use for VRF Protocol. Each VRV/VRF Brand has it's specified add-on module. Do not try to use it for other brands. Do not change the DIP switch from original states.

Network Settings

Please set the Network configuration according to your system, don't miss any parts or leave it empty.

In a case that you set DHCP, device will take all network configuration from router and finding your device through scanning network will take a time. For that reason, Manual configuration of network is suggested.

٦



Time:	12:05
Date:	18/09/2017
Time Zone:	Africa/Addis_Ababa 🗸
	Auto Time Update Auto Time Zone
Modbus TCP Port:	1502
Modbus Address:	1

View from browser: Settings page

• Time and Date Settings

Date and Time can be set automatically or manual from following tabs.

• Modbus settings

Port and slave address configuration for Modbus TCP connection. Default states of them you can see it on picture above.

Unit List:	CHANNEL_1 001 INDOOR WALL CHANNEL_1 002 INDOOR FLOOR CHANNEL_1 003 INDOOR CASSETTE4 CHANNEL_1 004 INDOOR CELLING CHANNEL_1 005 INDOOR DX CHANNEL_1 005 INDOOR WALL CHANNEL_1 007 INDOOR WALL CHANNEL_1 009 INDOOR CASSETTE4 CHANNEL_1 001 INDOOR CASSETTE4 CHANNEL_1 010 INDOOR CELLING CHANNEL_1 011 INDOOR DX CHANNEL_1 012 INDOOR DX
Emulator:	Yes
Watchdog:	No
Emergency Input:	No
Search Input:	No

View from browser: Settings page



Search Units

TECHNOLOGY

While wiring connection with Outdoor unit and VFACE is accomplished you can proceed to search. By clicking search you will be able to discover all indoor units which are connected to your system.

According to brands searching time may last up to 2 minutes.



Making a new search will delete all your present settings.

• Emulation

Simulation which creates virtual outdoor and indoor Units. The purpose of emulation is to create a platform for training, testing and introducing device. While Emulation is set all Units will be virtual and they have no any relation with real system.

• Watchdog

During system crash or fault device will be restarted automatically.

• Emergency Input

Digital input "II" is for emergency. It can be connected to the Security systems of building. During triggering with Common "C" system will turn off all units.

• Search Input

Digital input "**12**" is for Searching all Indoor/Outdoor units. After connecting all wiring part, you can trigger "**12**" as a result system will search all units inside the system and will appear on "Unit list".

Version:	v5.0.0 UPDATE
License Validation Status:	OK
Knx Enable:	Active
ModBus Enable:	Active
Outdoor Enable:	Active
Unit Count:	16
Serial Number:	05c344ac57504848806652721651660e
Activation Key: License Key:	63DE70-11DF4A-89325C-701AB6 n0k2uQpE/nfEh7fPyayf71PdcVh62nUvP4b2e 1upuz20iiwCzMKWsAwP3ABhBXaD1FvDmNit ue4UiYejQ5c5tR3xXJbVBzDhcJ0rdufAaAWIP0i e+6Wg3Y+eGYafSUcD0p+6Q93h71DMDX22Y PIRKpYApT+yGeHmWsMtmFAPuDEgeylubGww eJtonbTb1W5uUnP9X2+nKlhB5J27+FXWtvSyx 80YRDInh087IBo0R0g=
	APPLY

View from browser: Settings page





• Version

Displays the software version of the device. In a case when new version available you can Update it with **UPDATE** button.

• License

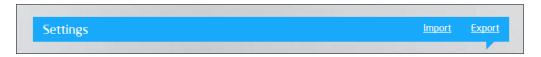
This section is generated during manufacturing and in an accordance of customer order. By contacting your dealer, you can upgrade your licenses.

License Key: Unique License Key of the device.

• APPLY

While configuring system you need always to save the changes by clicking **APPLY** button, otherwise your changes won't be saved and will remain the same.

• Import / Export



Import: If you want to upload the settings which is extracted from other device you can use import option and upload existed settings with .json file which you have.

Export: Creates and saves your current settings as .json file.



While importing different settings you need to take your own device backup. For that, firstly Export your current settings and save it, after you can import another setting.







User settings

	Users			
Settings				Add User
Users		Username:	Password:	
	Admin	∼ admin	•••••	
Define Units	User	vuser	••••	+ +
Weekly Schedule	User	vusername	password	+ ·
KNX Addresses				
System Log				APPLY

View from browser: User Settings

VFACE

Add User

• Add User: You can add new user and from account type, you can select the role of user as admin, use, guest.

User Type	Password	Description
admin	admin	System Administration: Can monitor, control and configure the system.
	(Default)	(Default)
user	***	Intended for end-user can monitor and control.
guest	***	Intended for end-user can monitor and control.

After selecting the account type enter "name" and "password" of new user and click apply button.

- -
- Delete User: Permanently deletes the user from the system.
- Select Sections: Select the sections which then can be controlled by the new user.

X		Select Section
	✓ Floor 1	Default
		Floor 2
		Floor 2

APPLY

• Apply: Save the configurations.



Define Units

	Dofir	ne Units						
	Dem	ie onits	and the set of the second second second					
Settings	Add	a section		+ Select section		~		
Jsers	Sea	irch:					A	ld Unit
	ID	Туре	Name	Section	Channel	ModBus	Active	Delete
veekiy Schedule	001	WALL 🗸	Entrance	Floor 1 🗸	PORT-1	Show		Delete
veekiy schedule	002	FLOOR ~	Corridor	Floor 1 🗸	PORT-1	Show		Delete
(NX Addresses	003	CASSETTE 4 🗸	Salon	Floor 1 🗸	PORT-1	Show		Delete
System Log	004	CEILING	Kitchen	Floor 1 🗸 🗸	PORT-1	Show		Delete
	005	DX 🗸	Hall	Floor 1 🗸	PORT-1	Show		Delete
	006	DUCT	Bedroom	Floor 1 🗸 🗸	PORT-1	Show		Delete
	007	WALL 🗸	Entrance	Floor 2 🗸	PORT-1	Show		Delete
	008	FLOOR 🗸	Corridor	Floor 2	PORT-1	Show		Delete
	009	CASSETTE 4 🗸	Salon	Floor 2 🗸	PORT-1	Show		Delete
	010	CEILING	Kitchen	Floor 2 🗸 🗸	PORT-1	Show		Delete
	011	DX 🗸	Hall	Floor 2 🗸	PORT-1	Show		Delete
	012	DUCT 🗸	Bedroom	Floor 2 🗸 🗸	PORT-1	Show		Delete
	064		Outdoor Unit 1		PORT-1	Show	*	Delete
	065	OUTDOOR 🗸	Outdoor Unit 2	OUTDOOR 🗸	PORT-1	Show		Delete
	066		Outdoor Unit 3		PORT-1	Show		Delete
	067	OUTDOOR 🗸	Outdoor Unit 4	OUTDOOR 🗸	PORT-1	Show		Delete
	1000	BROADCAST 🗸	BROADCAST	BROADCAST	PORT-1	Show		Delete
	1000	BROADCAST ~	BROADCAST	BROADCAST	PORT-2	Show	*	Delete

View from browser: Define Units

- Add a section: Define name to new section and click 🕂. If you want to delete, select the section and click 🖃
- Search: Find the unit more easer by entering name of unit.
- Add Unit: Indoor unit can be added by entering its Unit ID and clicking apply button.

Select Section		X
Unit ID		
Unit Name		
Unit Type	CASSETTE 4	~
Section Name		~
Port	PORT-1	~
		Apply

View from browser: Define Units/Add Unit

- Active: Makes visible on Indoor Monitoring page.
- **Delete:** Deletes the selected unit permanently.



VFACE



• Unit Settings: By clicking ID of the indoor unit you'll be able to make configuration.

Select Section		X
Unit ID		
Unit Name		
Unit Type	CASSETTE 4	~
Section Name		~
Port	PORT-1	~
		Apply

View from browser: Define Units/Add Unit

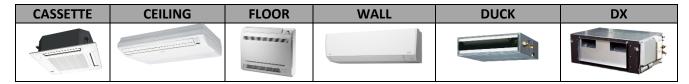
Unit ID: Set the unique ID of the unit.

Unit Name: Define name to the Unit.

Section Name: Select in which section you want to add following unit.

Port: Select to which Port unit is connected.

Unit Types: Select the type of Indoor Unit from table below.



Modbus: Clicking the "Show" button provides list of Modbus addresses for integration with 3rd party products.

Modbus Address List					
Name	Slaveld	Туре	Address		
CONNECTED	1	DISCRETE_INPUT	32		
ON-OFF (FB)	1	DISCRETE_INPUT	33		
ON-OFF	1	COIL	32		
FAN	1	HOLDING_REGISTER	32		
MOD	1	HOLDING_REGISTER	33		
SWING	1	HOLDING_REGISTER	34		
SET TEMP	1	HOLDING_REGISTER	35		
ROOM TEMP	1	INPUT_REGISTERS	32		
ERROR	1	INPUT_REGISTERS	33		
FAN (FB)	1	INPUT_REGISTERS	34		
MOD (FB)	1	INPUT_REGISTERS	35		
SWING (FB)	1	INPUT_REGISTERS	36		
SET TEMP (FB)	1	INPUT_REGISTERS	37		
T2B	1	INPUT_REGISTERS	38		
Protection	1	INPUT_REGISTERS	39		
T2	1	INPUT_REGISTERS	40		

View from browser: Define Units/Show Modbus

NSTRUM TECHNOLOGY

Weekly Schedule

Following options will provide to control the units automatically by defining Rule, schedule and function lock.

	Weekly Schedule								
Settings	Add New Schedule		_			_		×	Add Rule
Users	RULE NAME Enter Rule Name					On-Off Mod	Set F	an	
Define Units									
Weekly Sche	PZT SAL ÇRŞ PRŞ CUM CMT PZ	Time Option All Day							
KNX Address	SET FUNCTIONS								
	ON OFF	MOD Heat •	SET 20°	Ŧ	FAN Low	Ŧ			
System Log									APPLY
Contraction of the local division of the loc									
	+ Units						Delete		an 2d time.

View from browser: Weekly Schedule/Add Rule

- Rule name: Define name to the rule/schedule.
- Days: Select the week days which you want to run this rule/schedule.



+ Units

• Time Options: Set time when you want to run the rule/schedule.

Priority of "All Day" is higher than "Between" and "Single Time".



• Set Functions: Select which type of function you want to activate and include to your schedule.

On/Off: Define the state of unit.

Mode: Define mode of AC.

Set: Set the temperature.

Fan Mode: Define the intensity of fan.

- Units: Add which units and sections you want to include in you rule.
- Delete: Delete the Rule.





KNX Addresses

	KNX Add	dresses				
Settings	+ A	ld Unit		Search:		
Users	ID: 006	Name: Bedroom			-	Delete
Define Units	Name	Set Address	Feedback Address	Broadcast Address	DTP	
weekly Schedule	OnOff				BIT	~
	Mod				BYTE	~
<nx addresses<="" td=""><td>Fan</td><td></td><td></td><td></td><td>BYTE</td><td>~</td></nx>	Fan				BYTE	~
System Log	Set Temp				FLOAT	~
	Swing		Not Supported	Not Supported	BYTE	~
	Room Temp	Not Supported		Not Supported	FLOAT	~
	Error	Not Supported		Not Supported	BYTE	~

View from browser: KNX Addresses/Add Unit

Before Adding KNX Addresses make sure that you have plugged KNX add-on module to port 2 and connection are properly accomplished.

According to the KNX Project, you need to enter Group Addresses to the table above. Each indoor unit will have such table need to be filled.





System Log

77822		
ultimate vrf interface		
	System Log	
Settings	Date	Log
	2017-09-2018:21:49	superuser login success
Users	2017-09-2017:15:46	superuser login success
Define Units	2017-09-2016:16:35	Midea Provider opened
Denne Onits	2017-09-2016:16:34	VFace started
weekly Schedule	2017-09-2016:16:34	Knx opened
	2017-09-2016:16:33	VFace starting
KNX Addresses	2017-09-2016:16:32	VFace stoped
System Log	2017-09-2016:16:32	Knx closed
System cog	2017-09-2016:16:31	Midea Provider closed
	2017-09-2016:16:31	VFace stoping
	2017-09-2016:15:26	superuser login success
	2017-09-2015:13:56	superuser login success
	2017-09-2014:20:29	Midea Provider opened
	2017-09-2014:20:27	VFace started
	2017-09-2014:20:27	Knx opened
	2017-09-2014:20:27	VFace starting
	2017-09-2014:20:25	VFace stoped

View from browser: Settings/System Log

This menu provides information about last Logs in the system and also displays the action which were made during session.





VFACE Touch Interface

VFACE Touch presents by itself 7" capacitive touchscreen, which changes conception of BMS Automation by simple monitoring and control from Touch panel.

With including all options which VFACE Basic had and more, brings comfort and secure to your site.

While power up the device you'll face with a Lock Screen.

Default password is **1234**. Later password can be change from settings.



View from VFACE Touch: Lock Screen

After entering the password as a main page will bring you to the Indoor Monitoring page.

VFACE				21	September Thursday	09:53	👌 LOCK
Indoor Monitor	••••	All Sections	ID:001 Entr	ance			
E MENU		OFF	A	22.0 ROOM	16.0 set		
3 Error			ID:002 Corr	TEMP	TEMP		SECTIONS
0 Active 9 Closed		OFF	A	21.0	16.0		SECT
0 Locked		<u>•</u>	AUTO	ROOM TEMP	SET TEMP		
Ambient Temperature	。	OFF	ID:003 Salo	n			

View from VFACE Touch: Main Page/Indoor Monitoring

Units List: Under the Menu there is a list of all units and condition of them.



View: From view option, you can select Icon or List.

Lock: You can lock the screen any time you want.

Sections: By moving sections button to the left you can view indoor units section by section.





By selecting Icon from view you can see all indoor unit in a full screen



View from VFACE Touch: Main Page/Indoor Monitoring

You can click any indoor unit which you want to control.



View from VFACE Touch: Indoor Monitoring/Unit Configuration

On/Off: Enable or Disables the indoor unit.

Mode: Select the mode of indoor unit.

Fan Speed: Select the intensity of Fan speed.

Swing: Select the swing mode.

Set Temperature: You can set the temperature by clicking the (+) and (-) buttons.

Info bar: On the right-side diagnostic information of indoor unit is available.

Locked: If you apply All Day schedule the Locked button will be Enable.

Schedule: Indicates if it's included to any Schedule and is that schedule active.





Outdoor Monitoring

This section provides diagnostic information about the Outdoor units of VRV/VRF systems. Following information is just for monitoring, it's not allowed to make any changes.

VFACE				-	21 Se	eptember ^{ursday}	1	0:00	👌 LOCK
Outdoor Monitor		Port 1 ID:06	54 Outdo	oor Unit 1					
		OFF	A	0	26	16	2	4	34
III MENU	E8		AUTO	Outdoor T4	Inlet T3	Unit Capacity	Protecti on	Unit Count	Outlet T3
INDOOR MONITORING									
OUTDOOR MONITORING		Port 1 ID:06	5 Outdo	oor Unit 2					
SCHEDULE		OFF	A	37	9	16	1	4	18
SETTINGS			AUTO	Outdoor T4	Inlet T3	Unit Capacity	Protecti on	Unit Count	Outlet T3

View from VFACE Touch: Outdoor Monitoring

For more information about Outdoor Unit press More button.

Outdoor Monitoring						\bigotimes
PORT 1 ID:064 Outdoor Unit 1						
OFF	29	18	16	0	4	25
	Outdoor T4	Inlet T3	Unit Capacity	Protection	Unit Count	Outlet T3
	9	20	19	2	2	7
	Compressor-D1	EXV-2	Compressor-D3	Compressor-D2	Compressor Assist	Compressor-T1
EO	3	33	17	38	22	
	SolenoidValve	EXV-1	Compressor-T2	Compressor-T3	Compressor Rate	

View from VFACE Touch: Outdoor Monitoring/More





Settings

All the settings and configuration which were available in Web Interface also available in Settings of VFACE Touch.

U	nits	
_		

VFr	102					21	Septei Thursday	mber	10:0)4	👌 госк
									_		
							\oplus	ADD UNI	Т		SECTION
Units			Туре	N	lame	Secti	on			Port	Active
		~	Entrance		Floor 1		~	Port-1		Edit	Delete
E MEN	U	002	FLOOR V		orridor	Floor			~	Port-1	
UNITS		003	CASSETTE4 🗸	s	alon	Floor			~	Port-1	
PARAM	ETERS	004			litchen	Floor				Port-1	
USERS		004	CEILING			FIOD			~	FUIL-1	
SCHEDL	JLE	005	DX 🗸	F	lall	Floor			~	Port-1	
BMS		006	DRAIN V	E	Bedroom	Floor			~	Port-1	
LOG		007	WALL 🗸	ε	intrance	Floor			*	Port-1	
	APPLY	008	FLOOR V		Corridor	Floor			*	Port-1	
		000	CARGETTEA			Floor				Port 1	

View from VFACE Touch: Settings/Units

Displays all indoor units which exist in a system.

Active: Makes visible on Indoor Monitoring page.

Port: Displays to which port is connected indoor unit.

Section: Select to which section you want to include indoor unit.

Name: Define name to the Unit.

ID: Unique ID of the unit.

Types: Select the type of Indoor Unit from list.

• For Editing or Deleting of unit scroll desired unit to the left.

Edit: Open a window of Unit Editing

Delete: Delete the selected unit permanently.

ADD UNIT

Add Unit: Indoor unit can be added manually by entering its Unit ID and clicking apply button.

(+) ADD SECTION Add Section: Button brings you to the configuration of section, where you can Add/Edit/Delete the sections.





Parameters

• PORTS

VFACE		21 September Thursday	10:07 👌 LOCK
Parameters	PORTS NETWORK	ТІМЕ	BMS OTHER
E MENU	Port-1 Parameters		Search Units
UNITS	Port Type : VRF		~
PARAMETERS	Chose Brand : Midea X Y		~
USERS			
SCHEDULE	Port-2 Parameters		
BMS	Port Type : KNX		~
LOG			
APPLY			

View from VFACE Touch: Settings/Parameters/Ports

Channel-1 Parameters

Channel Type: Select type of protocol (VRF / Modbus / KNX)

Choose Brand: Select brand of system from available list

Channel-2 Parameters

Channel Type: Select type of protocol (VRF / Modbus / KNX)

• If you select Modbus as a channel type you will have set Baudrate menu to set.



Search: While wiring connection with Outdoor unit and VFACE is accomplished you can proceed to search. By clicking search you will be able to discover all indoor units which are connected to your system.

According to brands searching time may last up to 2 minutes.

NETWORK

VFACE			$21 _{_{\text{Thursday}}}$	10:08	👌 LOCK
Parameters		₩ORK	L) TIME	BMS	
E MENU	Network Settings				
UNITS		lp Address	192.168.2.112		
PARAMETERS	∎%æ⁄∎	Gateway	: 192.168.2.1		
USERS		Subnet Mask	255.255.0.0		
SCHEDULE		DNS	: 8.8.8.8		
BMS		External IP	: 176.33.178.228		
LOG			DHCP		
APPLY					

View from VFACE Touch: Settings/Parameters/Network

VFACE



Please set the Network configuration according to your network, don't miss any parts or leave it empty.

In a case that you set DHCP, device will take all network configuration from router and finding your device through scanning network will take a time. For that reason, Manual configuration of network is suggested.

IP Address: Set IP Address to device.

Gateway: Enter gateway address.

Subnet Mask: set subnet mask according to your network system.

DNS: Suggested default DNS server 8.8.8.8

External IP: Displays Static/External IP of the network.

QR Code: Download VFACE Mobile App to your mobile device and scan the QR Code for remote access.

• Date & Time

VFACE			21 September	10:09	👌 LOCK
Parameters	(II) PORTS		() TIME	CL BMS	
E MENU	DATE & TIME				
UNITS	Time	10:08			~
PARAMETERS	Date	21/09/2017			~
USERS	Time Zone	(GTM+03:00)-East Af	rica Time		~
SCHEDULE		Auto Time Update	e 📃	Auto Time Zone	
BMS	Lock Timeout		Second		
LOG	Display Timeout :	10	Second		
APPLY					

View from VFACE Touch: Settings/Parameters/Time

Date and Time settings can be configurated in manual also you can be set Automatically.

Lock Timeout: Define the time interval before Locking the screen.

Display Timeout: Define the time interval before Display turns off.





• BMS

VFACE				21 September	10:09	👌 LOCK
Parameters	} ∥₿	(II) PORTS		ТІМЕ	Б ВW2	
		BMS				
UNITS		Modbus Tcp Port	1502			
PARAMETERS		Modbus Address	: 1			
USERS						
SCHEDULE						
BMS						
LOG						
API	PLY					
	PLY					

View from VFACE Touch: Settings/Parameters/BMS

Port and slave address configuration for Modbus TCP connection. Default states of them you can see it on picture above.

21 September 👌 LOCK 10:10 VFACE р**Л** Parameters OTHER MENU Emulator Emergency Input NO NO Watchdog SCHEDULE Lock Password BMS Version APPLY License Validation Status

• Other

View from VFACE Touch: Settings/Parameters/Other

Following settings are the same as in the Web interface. There only one deference is lock password.

Lock Password: Define the Lock screen password. Default password is 1234.





VFACE		21 September 10:11 8 LOCK
Parameters	(I) PORTS N	
	Knx Enable	: Active
UNITS	Modbus Enable	: Active
PARAMETERS	Outdoor Enable Unit Count	Ctive
USERS	Serial Number	: 16 : 05c344ac57504848806652721651660e
SCHEDULE	Activation Key	: 63DE70-11DF4A-89325C-701AB6
BMS	License Key	nf6h7fPyayf71PdcVh62nUvP4b2e1upuz20iiwCzMKWsAwP3ABhBXaD1f
LOG		<pre>vDmNitue4UiYgiQ55fR3xXjbVBzDhcjOrdufAaAvlPOie+6Wg3Y+eGYafSU cD0p+6Q93h71DMDX22YPIKpYApT+yGeHmWsMtmFAPuDEgeylubGww</pre>
APPLY		SYSTEM SETTINGS

View from VFACE Touch: Settings/Parameters/Other

This section is generated during manufacturing and in an accordance of customer order. By contacting your dealer, you can upgrade your licenses.

License Key: Unique License Key of the device.



System Settings: Brings to the operation system settings of touch panel.

Followings settings is for technical representative, don't make any changes it will cause failure in the entire device.

Users

VFACE		21 September	10:11 💧 в соск
Users S	User Type User Name		⊕ Add
E MENU	USER user		🖲 Edit
UNITS			O can
PARAMETERS			🛞 Delete
USERS			
SCHEDULE			
BMS			
LOG			
APPLY			

View from VFACE Touch: Settings/User

All type of users can be added and existed users can be Edited or Deleted through following section.





Schedule

	21 September Thursday	10:16 🛛 👌 Loc
Rule		
0 STT SET 0 MOD FAN		
M T W T F S S 00:00-00:00		
	O GTT SET O MOD GAN M T W T F S S	Rule STT SET MOD FAN M T W T F S S

View from VFACE Touch: Settings/Schedule

New schedule can be created by clicking **add schedule** and existed can be edited by clicking on it.

Schedule Settings	\bigotimes
RULE NAME New Rule	
MON TUE WED THU FRI SAT SUN	TIME OPTIONS
SET FUNCTIONS OPERATING MODE S OFF ON None S	SET TEMPERATURE FAN SPEED
	\bigcirc

View from VFACE Touch: Settings/Schedule/Add Rule

Adding rule/schedule is similar to the Web Interface select actions, after define units which you want to control.





BMS

Bms Filter:	
	Port-1
Entrance Corrido Salon Kitcher	
UNITS ID:001 ID:002 ID:003 ID:004	
PARAMETERS INDOOR Port-1 INDOOR Port-1 INDOOR Port-1 INDOOR USERS	Port-1
SCHEDULE Hall Bedrog Entrange Corrido	
BMS ID:005 ID:006 ID:007 ID:008	
LOG INDOOR Port-1 INDOOR Port-1 INDOOR Port-1 INDOOR	Port-1
APPLY Salon Kitche Hall Bedrog	

View from VFACE Touch: Settings/BMS

By clicking indoor unit you can reach the modbus and KNX table which needed to be filled for integration with other systems.

MODBUS SETTINGS KNX SETTINGS			
ID:001	NAME:001		
NAME	BUSID	ТҮРЕ	ADDRESS
CONNECTED		DISCRETE_INPUT	32
'ON-OFF (FB)		DISCRETE_INPUT	33
ON-OFF		COIL	32
FAN		HOLDING_REGISTER	32
MOD		HOLDING_REGISTER	33
SWING		HOLDING_REGISTER	34
ROOM TEMP		INPUT_REGISTERS	32
ERROR		INPUT_REGISTERS	33
FAN (FB)		INPUT_REGISTERS	34
MOD (FB)		INPUT_REGISTERS	35
SWING (FB)		INPUT_REGISTERS	36
SET TEMP (FB)	1	INPUT_REGISTERS	37

View from VFACE Touch: Settings/BMS/Modbus

Modbus addressing table per unit for integration with 3rd party devices.





MODBU	S SETTINGS	KNX SETTINGS			\bigotimes
ID:00 1	NAME:001				
NAME	SET ADDRESS	FEEDBACK ADDRESS	BROADCAST ADDRESS	DTP	
On/Off				BIT	~
Mod				BYTE	~
Fan				BYTE	~
Set Temp				FLOAT	~
Swing				BYTE	~
Room Temp				FLOAT	~
Error				BYTE	~
					\bigcirc

View from VFACE Touch: Settings/BMS/KNX

According to the KNX Project, you need to enter Group Addresses to the table above. Each indoor unit will have such table need to be filled.

LOG

VFACE				21 September 10:19 🗄 LOCK
	Z	TIME	DATE	L0G
Log	۲	0938:26	21/09/2017	superuser login success
		0922:01	21/09/2017	Midea Provider opened
MENU		092159	21/09/2017	VFace started
UNITS		092159	21/09/2017	Knx opened
PARAMETERS		092159	21/09/2017	VFace starting
USERS				
SCHEDULE				
BMS				
LOG				
A	PPLY			

View from VFACE Touch: Settings/Log

This menu provides information about last Logs in the system and also displays the action which were made during session.





VFACE Support List

	OUTDOOR	INDOOR
DAIKIN VRV	RXYQ-M/P (VRV II,VRV III) RXYQ (VRV-IV) RQYQ-P, RQCEQ (RQEQ) , RYYQ-T (RYMQ), (VRV4) RQZQ-ABYN RXYK (VRV) RXYSQ-M/P (VRV Small) RXYSCQ RHXY RHXYQ RXY-M RWEYQ REYQ (REMQ), REYHQ REAQ RXYCQ-A RQQ RXYQ-T RXTQ RYZQ	FJEKP FXCQ FXNQ FXLQ FXLQ FXFQ FXFQ FXCQ FXDQ FXDQ FXDQ FXDQ FXDQ FXDQ FXDQ FXQ FXQ FXQ FXQ FXQ FXQ FXQ FXQ FXQ FX
HITACHI H link adapter (PSC-6RAD)	RAS-FSN RAS-FSXN RAS-FXNE	FXDp FDYQN RCI RPC RPFI RCD RPK RPI
MITSUBISHI ELECTRIC VRF	PUHY PURY PQHY PQRY PUMY	RPF PKFY PFFY-PVKM PLFY-P-VCM PEFY-P-VLRM PCFY-P-VLRM PCFY-P-VLMD PEFY-P-VLMD PEFY-P-VLEM PLFY-P-VBM PMFY-P-VBM PEFY-P-VMA PEFY-P-VMA PEFY-P-VMA PEFY-P-VMA-E PEFY-P-VMA-E PEFY-P63VMA(L)-E PVFY-P
MITSUBUSHI ELECTRIC Split / Multi Split	PUHZ	PEAD SEZ-KD





PANASONIC	MFL	NWFL
	EFL	NDHP
	SPW_CO	NPFL
	SPW-C	NPFL
	SPW-CR	NDSLP
	SGP-EZ	NKFL
	SGP-EW	NFFL
	U-ME	NDLP
		NK2FL
		NFMFL
		SPW-X
		SPW-XM
		SPW-ADR
		SPW-SR
		SPW-LDR
		SPW-FUR
		SPW-K
		SPW-FMR
		SPW-FTR
		SPW-FR
		SPW-KR
		SPW-UMR
		SPW-U
		S-MF
		S-MU
		S-MY
		S-ML
		S-MD
		S-MM
		S-MZ
		S-ME
		S-MT
		S-MK
		S-MP
		S-MR
SANYO	MFL	NWFL
5/ 11 0	EFL	NDHP
	SPW CO	NPFL
	SPW-C	NPFL
	SPW-CR	NDSLP
	SGP-EZ	NKFL
	SGP-EW	NFFL
	200 200	NDLP
		NK2FL
		NFMFL
		SPW-X
		SPW-X SPW-XM
		SPW-ADR
		SPW-SR
		SPW-LDR
		SPW-FUR
		SPW-K
		SPW-FMR
		SPW-FTR
		SPW-FR
		SPW-KR





		SPW-UMR
		SPW-U
тосица	MCY-MAPHT	MMU-APH
TOSHIBA	MCY-MHPE	MMK-APE
	MMY-MAPT8	MML-APE
	MMY-MAPHT8	MMU-APYH
	MMY-MAPFT8	MMD-APSPH
	MINIY-MAPF18	
		MML-APH
		MMD-APHFE
		MMU-APMH
		MMD-APBH
		MMC-APH
		MML-APBH
		MMU-APWH
		MMD-APH
		MMK-APH
		MMF-APH
LG	ARUB-LT	ARNU-GB1G
29	ARU	ARNU-GCEA
	ARUN-LT	ARNU-GSEL
	ARUN-GS	ARNU-GSBL
	ARUN-LR	ARNU-GSER
	ARUN-BTE	ARNU-GSF
	ARUV-LT	ARNU-GTEC
	ARWB-BAS	ARNU-GTJC
	ARWN-BAS	ARNU-GB1G
		ARNU-GBHA
		ARNU-GCFA
		ARNU-GCFU
		ARNU-GBGA
		ARNU-GTMC
		ARNU-GBRA
		ARNU-SCR
		ARNU-NJA
		ARNU-NKA
		ARN
		ARNBG
		ARNL
		ARNTP
		ARNTM
MITSUBISHI HEAVY	FDCA	FDTA
	FDC	FDUA
Super Link Interfaces (SC-		FDT
AND-E)		FDTCA
		FDQSA
		FDCT
		FDQS
		FDTQA
		FDKA
		FDTW
		FDK
		FDTSA
		FDEA
		FDTS
		FDE
		FDTWA





	-	1
		FDFLA
		FDTQ
		FDFL
		FDUMA
		FDFUA
		FDU
		FDFU
SAMSUNG	AM072FXVAFH/AA	AM009FN4DCH/AA
5/ 11150110	AM096FXVAFH/AA	AM018FN4DCH/AA
	AM120FXVAFH/AA	AM024FN4DCH/AA
	AM144FXVAFH/AA	AM030FN4DCH/AA
	AM168FXVAFH/AA	AM036FN4DCH/AA
	AM192FXVAFH/AA	AM048FN4DCH/AA
	AM216XVAFH/AA	AM009FNNDCH/AA
	AM240FXVAFH/AA	AM012FNNDCH/AA
	AM264FXVAFH/AA	AMo18FNNDCH/AA
	AM288FXVAFH/AA	AMo2oFNNDCH/AA
	AM312FXVAFH/AA	AM007FN1DCH/AA
	AM336FXVAFH/AA	AM009FN1DCH/AA
	AM360FXVAFH/AA	AM012FN1DCH/AA
	AM348FXVAFH/AA	AM036FNHDCH/AA
	AM408FXVAFH/AA	AM048FNHDCH/AA
	AM432FXVAFH/AA	AM076FNHDCH/AA
	AM072FXVAFR/AA	AM096FNHDCH/AA
	AM096FXVAFR/AA	AM018FNMDCH/AA
	AM120FXVAFR/AA	AM024FNMDCH/AA
	AM144FXVAFR/AA	AM030FNMDCH/AA
	AM168FXVAFR/AA	AM036FNMDCH/AA
	AM192FXVAFR/AA	AM048FNMDCH/AA
	AM216XVAFR/AA	AM007FNLDCH/AA
	AM240FXVAFR/AA	AMoo9FNLDCH/AA
	AM264FXVAFR/AA	AM012FNLDCH/AA
	AM288FXVAFR/AA	AM024FNLDCH/AA
	AM312FXVAFR/AA	AM030FNLDCH/AA
	AM336FXVAFR/AA	AM036FNLDCH/AA
	AM360FXVAFR/AA	AM048FNLDCH/AA
	AM348FXVAFR/AA	AM007FNTDCH/AA
	AM408FXVAFR/AA	AM009FNTDCH/AA
	AM432FXVAFR/AA	AM012FNTDCH/AA
	AM072FXVAJH/AA	AM012FNTDCH/AA
	AM096FXVAJH/AA	AM020FNTDCH/AA
	AM120FXVAJH/AA	AM020FNTDCH/AA
	AM144FXVAJH/AA	AM0241 NTDCH/AA
	AM168FXVAJH/AA	AM013FNCDCH/AA
	AM192FXVAJH/AA	AM071FNMDEH
	AM192FXVAJH/AA AM216XVAJH/AA	AM090FNMDEH
	AM210XVAJH/AA AM240FXVAJH/AA	AM090FNMDEH AM028FN1DEH
	AM240FXVAJH/AA AM264FXVAJH/AA	AM028FN1DEH AM071FN1DEH
	AM264FXVAJH/AA AM288FXVAJH/AA	AM071FN1DEH AM071FNCDEH
	AM312FXVAJH/AA	AM015HNNDEH/EU
	AM336FXVAJH/AA	AM015HNQDEH/EU
	AM360FXVAJH/AA	AM022FNNDEH/EU
	AM348FXVAJH/AA	AMo28FNNDEH/EU
	AM408FXVAJH/AA	AM017FNLDEH/EU
	AM432FXVAJH/AA	AM022FNLDEH/EU
	AM072FXVAJR/AA	AMo28FNLDEH/EU





AMo96FXVAJR/AA	AMo36FNLDEH/EU
AM120FXVAJR/AA	
AM144FXVAJR/AA	
AM168FXVAJR/AA	
AM192FXVAJR/AA	
AM216XVAJR/AA	
AM240FXVAJR/AA	
AM264FXVAJR/AA	
AM288FXVAJR/AA	
AM312FXVAJR/AA	
AM336FXVAJR/AA	
AM360FXVAJR/AA	
AM348FXVAJR/AA	
AM408FXVAJR/AA	
AM400FXVAJN/AA AM432FXVAJR/AA	
AM432FAVADR/AA AM036FXMDCH/AA	
AM030FXMDCH/AA AM048FXMDCH/AA	
AM053FXMDCH/AA	
AM055FXMDCH/AA AM080FXWANR/EU	
AM100FXWANR/EU	
AM120FXWANR/EU	
AM160FXWANR/EU	
AM180FXWANR/EU	
AM200FXWANR/EU	
AM220FXWANR/EU	
AM240FXWANR/EU	
AM260FXWANR/EU	
AM280FXWANR/EU	
AM300FXWANR/EU	
AM320FXWANR/EU	
AM340FXWANR/EU	
AM360FXWANR/EU	
AM380FXWANR/EU	
AM400FXWANR/EU	
AM420FXWANR/EU	
AM440FXWANR/EU	
AM480FXWANR/EU	
AM500FXWANR/EU	
AM520FXWANR/EU	
AM600FXWANR/EU	
AMo6oFXMDEH/EU	
AMo8oFXVAGH/EU	
AM240FXVAGR/EU	
AM140FXVAGR/EU	
AM180FXVAGR/EU	

