

TECHNICAL NOTE



Inverter

Yardy EV3
Yardy DUCT2
AC Motor

Floor or ceiling ducted fan coils

Yardy EV3
Fan coils with casing and for built-in installation

Yardy DUCT2
Ducted fan coils

Yardy-I EV3
Yardy-ID2
Brushless motor EC

Floor or ceiling ducted fan coils

Yardy-I EV3
Fan coils with casing and for built-in installation

Yardy-ID2
Ducted fan coils



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RHOSS USEFUL FOR LEED

LEED certification - which stands for "Leadership in Energy and Environmental Design" - is now the most internationally established protocol for defining and assessing the environmental sustainability of buildings. It was introduced in 1998 by the U.S. Green Building Council (USGBC) and was subsequently established internationally.



It is voluntary certification based on the consent that provides investors and all stakeholders with precise references for the design, construction and management of high performance green buildings.

LEED is a flexible system that can be applied to all types of buildings, both new and existing, and covers the entire life cycle of the building.

LEED certification is aimed at promoting a constructive transformation of the industry to achieve seven main objectives [LEED Version 4 - BD+C Guide]:

- Invert the contribution to climate change
- Improve individual health and well-being
- Protect and restore water resources
- Protect, enhance and restore ecosystems and biodiversity
- Promote procurement cycles of sustainable and regenerative materials
- Create "green economy"
- Improve social equity, public health and quality of life

Since LEED is certification dedicated to buildings, products, technologies or building materials cannot be LEED certified and can only help meet the criteria of specific pre-requisites and credits of the LEED reference guide and help the building increase its score.

However, making an informed choice of certain products and technologies other than others may have a significant impact on the total score of the building; an impact that can reach 50% of the total.

For this reason, the manufacturer may have an important role in the certification process and provide concrete support to the parties involved. The role of the manufacturer will be basically consist of two activities:

- Provide precise mapping of products and/or technologies, aimed at identifying which products can be used in a LEED project and which pre-requisite criteria and credits do these products help fulfil
- Offer services and expertise that simplify and facilitate certain activities, which are specifically required by LEED standards

RHOSS units have been analysed according to the criteria described in Version 4 of the LEED certification, published in November 2013 and currently still flanked by Version 3 of 2009, with particular attention paid to the LEED Building Design and Construction guide.

With regards to the minimum energy efficiency criteria, aimed at determining whether a particular model can be used in a LEED project, the reference standard of Version 4 is ASHRAE Standard 90.1-2010, section 6.4 - 6.8 and table 6.8.1C, which replaces ASHRAE Standard 90.1-2007 used as a reference for LEED certification Version 3. Clearly, all RHOSS models that meet the minimum efficiency criteria of Version 4 also automatically meet the criteria of Version 3.

RHOSS SpA is a member of USGBC and actively supports the awareness of the principles of the sustainable design in the world.

GLOSSARY

GWP = Global Warming Potential - An index that expresses the greenhouse effect caused by gas emission into the atmosphere. Each substance has a definite potential in relation to CO₂, which has been conventionally defined as a potential equal to 1.

LCGWP = Life Cycle Global Warming Potential - An index which defines the global warming potential of the entire life cycle of the product. This index depends on: GWP of the refrigerant used, useful life of the product, estimated annual loss of refrigerant and end of life, amount of unit refrigerant.

LCODP = Life Cycle Ozone Depletion Potential - The index which defines the potential destruction of the stratospheric ozone layer of refrigerant used throughout the life cycle of the product. This index is 0 for refrigerants of the HFC family (R134a and R410A).

1. General Features

1.1 Structural features Yardy, Yardy-I

Yardy - Versions with cover

Covering cabinet composed of:

- sides and front panel in galvanized and pre-painted thick steel sheet, RAL9003 colour with a matte finish, covered with a protective film of polyvinyl chloride and internally insulated with a sound-absorbing and self-extinguishing mat;
- return grille (for MVT MXT versions) made of heat-resistant ABS polymer, RAL7035 colour;
- outlet grille on the upper part of the fan coil, made of heat-resistant ABS polymer with fixed flaps, color RAL7035.

Access doors to the technical compartments and the control panels fitted with a locking screw. Galvanised steel sheet structure complete with anti-condensate insulation on the sides, back and front panels of the unit and the condensation drain pan with natural drainage complete with anti-condensate insulation. Finned coil heat exchanger with copper pipes and aluminium fins (2, 3, 4 rows), manifolds in die-cast brass, complete with a patented hydraulic distributor with low pressure drop.

Threaded connections ($\varnothing \frac{3}{4}$ female gas for the main coil, $\varnothing \frac{1}{2}$ female gas for the additional coil) on the left side of the unit and reversible to the right directly on site, fitted with an air vent and discharge valve.

A centrifugal fan with a double inlet with statically and dynamically balanced aluminium or ABS fans.

Yardy-EV3

AC motor coupled directly to 6 speeds of which 3 connected in the terminal block, equipped with internal thermal protection with condenser permanently fitted.

Yardy-I

A brushless electronic synchronous motor with permanent magnets controlled by an inverter that generates sinusoidal voltage modulated in frequency and amplitude. The inverter is powered by a single-phase voltage 230Vac 50/60Hz and is controllable via an analogue signal in direct current between 0-10Vdc. The motor is equipped with internal thermal protection.

Polypropylene mesh renewable filter (filter class G1) mounted on an easily removable guide; the filter in the MVT and MXT versions with a front grill is inserted directly on the inlet grille.

Power supply voltage: 230 V-1 ph-50 Hz.

Quick coupling connectors for the direct connection to the commands and controls in the MVP, MVT versions. Terminal block for the power supply and connection to the commands and controls for the MXP, MXT versions.

Yardy - Recessed versions

Structure composed of galvanised steel sheet metal, complete with anti-condensation insulation on the sides, back and front panel of the unit and natural condensate drain pan. Finned coil heat exchanger with copper pipes and aluminium fins (2, 3, 4 rows), manifolds in die-cast brass, complete with a patented hydraulic distributor with low pressure drop. Threaded connections ($\varnothing \frac{3}{4}$ female gas for the main coil, $\varnothing \frac{1}{2}$ female gas for the additional coil) on the left side of the unit and reversible to the right directly on site, fitted with an air vent and discharge valve.

Yardy-EV3

AC motor coupled directly to 6 speeds of which 3 connected in the terminal block, equipped with internal thermal protection with condenser permanently fitted.

Yardy-I

A brushless electronic synchronous motor with permanent magnets controlled by an inverter that generates sinusoidal voltage modulated in frequency and amplitude. The inverter is powered by a single-phase voltage 230Vac 50/60Hz and is controllable via an analogue signal in direct current between 0-10Vdc. The motor is equipped with internal thermal protection.

Polypropylene mesh renewable filter (filter class G1) easily removable from the front part by removing a fastening sheet in IXP version.

Power supply voltage: 230 V-1 ph-50 Hz.

Supply terminal board and connection to the commands and controls.

1.2 Structural features YardyDUCT, Yardy-ID

Yardy - Ductable recessed version

Structure composed of galvanised steel sheet metal, complete with anti-condensation insulation on the sides, back and front panel of the unit and natural condensate drain pan for vertical and horizontal installations. Finned coil heat exchanger with copper pipes and aluminium fins (2, 3, 4 rows), manifolds in die-cast brass, complete with a patented hydraulic distributor with low pressure drop. Threaded connections ($\varnothing \frac{3}{4}$ female gas for the main coil, $\varnothing \frac{1}{2}$ female gas for the additional coil) on the left side of the unit and reversible to the right directly on site, fitted with an air vent and discharge valve.

A centrifugal fan with a double inlet with statically and dynamically balanced aluminium or ABS fans.

YardyDUCT2

AC motor coupled directly to 6 speeds, equipped with internal thermal protection with condenser permanently fitted.

Yardy-ID2

A brushless electronic synchronous motor with permanent magnets controlled by an inverter that generates sinusoidal voltage modulated in frequency and amplitude. The inverter is powered by a single-phase voltage 230Vac 50/60Hz and is controllable via an analogue signal in direct current between 0-10Vdc. The motor is equipped with internal thermal protection. A renewable polypropylene synthetic filter (G1 filter class) easily removable from the front by removing a fastening plate.

Power supply voltage 230Vac $\pm 10\%$ 1ph 50Hz.

Supply terminal board and connection to the commands and controls.

Yardy Cover

Installation solution with aesthetic covering panel, RAL9003 colour with a matte finish, available in 3 sizes, compatible with the ranges and models shown in the table, and 2 types of covering panels:

- KPVCASE aesthetic panel for vertical installation, with return grille and 180° adjustable delivery fin.
- KPXCASE aesthetic panel for horizontal and vertical installation, with return grille and air delivery through an aluminium vent (KG and KGF) and connection fittings (KRDM and KRTM).

Yardy Cover	Width mm	920	1125	1325
Yardy-I EV3	Model	20 - 24	30 - 34	45 - 48
Yardy EV3	Model	20 - 24	25 - 30 - 34	40 - 45 - 48

1.3 Declared conditions of use

Air handling fan coil for indoor use, intended to be used for air handling (summer and winter air conditioning) domestic or similar indoor rooms.

The units are designed for installation in closed environments in conditions involving a non-marine, 'urban' atmosphere with no corrosion or dust. The unit must not be installed in areas where there are flammable gases or acid or alkaline substances.

The unit is not designed to be installed in rooms used for laundry purposes (IEC EN 60335-2-40).

1.4 Versions

Yardy, Yardy-I EV3 with cabinet

- MVP version

Vertical unit with cabinet with lower air return and upper air flow to be wall-mounted or set on the ground with feet.

- MVT version

Vertical unit with cabinet with front air inlet and upper outlet for floor installation.

- MXP version

Horizontal/vertical unit with cabinet for horizontal ceiling installation, vertical wall-mounting or floor installation with feet.

- MXT version

Horizontal/vertical unit with cabinet for horizontal ceiling installation or vertical floor installation.

Yardy EV3, Yardy-I EV3 recessed

- IVP version

Recessed vertical unit with lower air inlet and upper outlet for wall installation.

- IVF version

Recessed vertical unit with lower air inlet and front outlet for wall installation.

- IXP version

Recessed horizontal/vertical unit for false ceiling installation or recessed wall installation.

Yardy DUCT2, Yardy-ID2 ductable recessed version

- CXP version

Ductable recessed unit for vertical wall or horizontal ceiling installation.

Yardy Cover only for Yardy EV3, Yardy-I EV3 version IVP, IXP

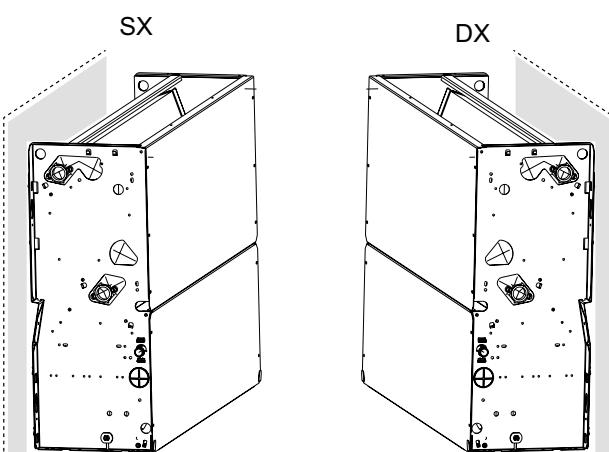
Yardy Cover consists of casing, for recessed wall or false ceiling installation, and an aesthetic panel for vertical installation or an aesthetic panel for horizontal installation, with a telescopic fitting and delivery grille, in RAL9003 white with a matte finish.

1.5 Installations

Connections side

- LEFT CONNECTIONS - Hydraulic connections on the left side of the unit that can be reversed to the right directly on site
- RIGHT CONNECTIONS - Hydraulic connections on the right side of the unit that can be reversed to the left directly on site

The unit is supplied as standard with left hydraulic connections



Type of unit

- 2T - Single main battery
- 4T - Double battery, main and additional

Power supply

- 230V/1ph/50Hz – Connection terminal block; quick connector, only for vertical versions MVP - MVT.
- 230V/1/50 + Electrical box – Connection terminal block in IP31 electrical box, only for IVP, IVF, IXP, CXP versions.

Factory Fitted Accessories

Main coil valve

- E2-2V - On/off 2-way valve
- E2 - On/off 3-way valve
- E2DD - On/off 3-way valve with hoses and locks
- E2X4 - On/off 4-way valves for 2-pipe-systems

Main coil valves+additional

- E4-2V - On/off 2-way valves
- E4 - On/off 3-way valves
- E4DD - On/off 3-way valve with hoses and locks

Additional tray

- VAV - Vertical tray
- VAO - Horizontal tray

Electrical resistance

- RER - Electrical resistance with relay

Filter

- Standard – Standard filter in polypropylene
- AIRST – Air'Suite biocide filter (only for MVP, MXP; IVP, IVF, IXP versions)

Return air flange

- Ø10cm - Air inlet hole on the wiring side (only for IXP-IVP-IVF-CXP versions)
- Ø12cm - Air inlet hole on the hydraulic connections side (only horizontal installation IXP-CXP version)

Yardy EV3 Yardy-I EV3

Version	With cover				Recessed		
	MVP	MVT	MXP	MXT	IVP	IVF	IXP
Vertical installation							
Horizontal installation							

Yardy DUCT2 - Yardy-ID2

Version	Ductable
	CXP
Vertical installation	
Horizontal installation	

Yardy Cover

Aesthetic panel	KPV CASE	KPX CASE
Yardy - Yardy-I	IVP - IVP	IXP - IVP (*)
Casing	KCASE	KCASE
Fitting	-	KRDM+KRTM
Grid	-	KGMD or KGw
Vertical installation		
Horizontal installation		

(*) The IVP version can only be used for vertical installation.

The CXP version can be used in case of channeling the air flow.

1.6 Accessories

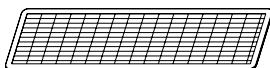
Yardy - All versions

Air'Suite filter

- **KAIRST** - Air'Suite biocide filter (supplied separately - only for versions MVP, MXP, IVP, IVF, IXP)
- **AIRST** - Air'Suite biocide filter (factory fitted - only for versions MVP, MXP, IVP, IVF, IXP)

Patented antibacterial filtration system, consisting of a filtering septum with G2 efficiency (according to EN779), activated with inorganic antimicrobial nano-particles to prevent bacterial growth in the filtering material.

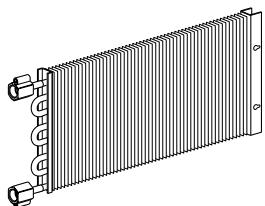
Fire reaction F1 according to DIN 438-3.



Additional coil

- **KB4** (supplied separately)
- **4T** (factory fitted)

Additional water heating coil, in copper pipes and aluminium fins, with left or right connections, reversible on site.

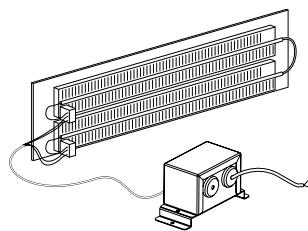


Electric heater

- **KRER** (supplied separately only for vertical versions MVP, MVT, IVP, IVF)
- **RER** (factory fitted, for all versions)

Armoured electrical resistance made of aluminium complete with safety device for overtemperature, with relay for connection to control KTCV2/TCV2, KTCVR/TCVR, KTVD/KTVDI, KCF/.

The electrical resistance (KRER) is supplied separately only for vertical versions MVP, MVT, IVP, IVF.

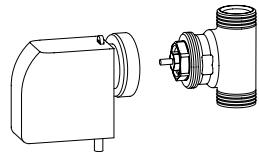


Model	power			
	0,5 kW	1 kW	2 kW	3 kW
Yardy EV3	15-20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3	20-24	30-34	45-48	60-74-80-88
YardyDUCT2	-	-	40-48	60-74-80-88
Yardy-ID2	-	-	40-48	60-74-80-88

ON/OFF electrovalves

2-way valve

Brass 2-way valves; electrothermal actuators with ON/OFF action (NC normally closed).
Power supply: 230 V
Protection rating: IP44
Total opening time: 4 minutes



- **KE2-2V**

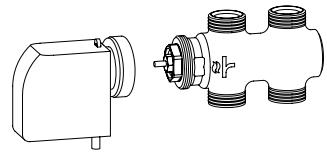
2-way ON/OFF electrovalves for 2-pipe systems.

- **KE4-2V**

2-way ON/OFF electrovalves for 2-pipe systems.

3-way valve

3-way valves with 4 brass connections, with integrated bypass; electrothermal actuators with ON/OFF action (NC normally closed). Power Supply: 230V.
Protection rating: IP44 Total opening time: 4 minutes



- **KE2** (supplied separately)

- **E2** (factory fitted)

3-way ON/OFF electrovalve for 2-pipe systems.

- **KE4** (supplied separately)

- **E4** (factory fitted)

3-way ON/OFF electrovalve for 4-pipe systems.

- **KE2DD** (supplied separately)

- **E2DD** (factory fitted)

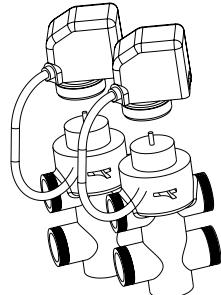
ON/OFF 3-way electrovalve with flexible pipes for 2-pipe systems with valve and balancing valve for vertical and horizontal versions.

- **KE4DD** (supplied separately)

- **E4DD** (factory fitted)

4-way valve

4-way on/off double electrovalve to use a fan coil with a single main coil, with 2 connections, in a 4-pipe system.



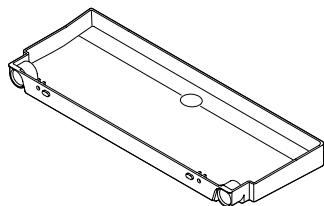
- **KE2X4** 4-way ON / OFF solenoid valves for 4-pipe system, for units with single battery (supplied separately)

- **E2X4** 4-way ON / OFF solenoid valves for 4-pipe systems, for single-battery units (factory mounted)

Auxiliary pans

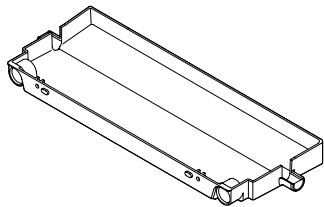
- **KVAV** (supplied separately)
- **VAV** (factory fitted)

Auxiliary condensate drain pan for vertical installation.



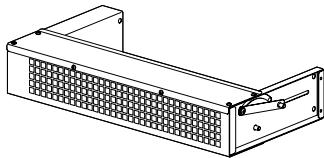
- **KVAO** (supplied separately)
- **VAO** (factory fitted)

Auxiliary condensate drain pan for horizontal installation.

**Damper**

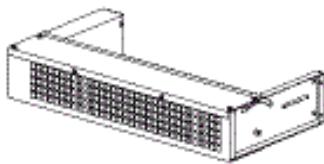
- **KSW (supplied separately)**

Manually-controlled damper for outdoor air return (up to 35%) for the MVP version to be used with the KPC support feet accessory, RAL9003 colour with a matte finish.



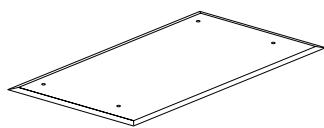
- **KSMW (supplied separately)**

Motorised damper for outdoor air intake (up to 35%) for the MVP version (to be used with KPC support feet accessory), with a limit switch contact to indicate the completely open state, RAL9003 colour with a matte finish.
Power supply 230V-1 ph-50 Hz.
The installer is responsible for the switch control.

**Yardy - Versions with cover MVP-MVT-MXP-MXT****Panels and grids**

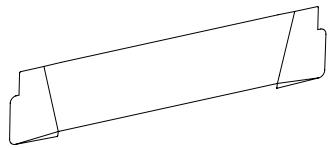
- **KSVW (supplied separately)**

Back in view in pre-painted sheet metal (for versions MVP-MXP eMVT-MXT), RAL9003 colour with a matte finish.



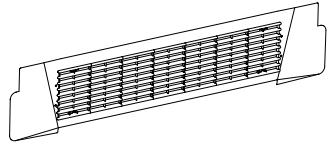
- **KPPW (supplied separately)**

Back closing panel made of pre-painted sheet metal to install the MXT version at a distance from the wall, RAL9003 colour with a matte finish.



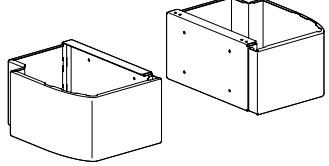
- **KPPGW (supplied separately)**

Back closing panel made of pre-painted sheet metal with a grille and filter to install the MXP version at a distance from the wall, RAL9003 colour with a matte finish.

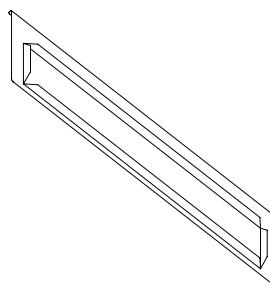
**Feet**

- **KPCW (supplied separately)**

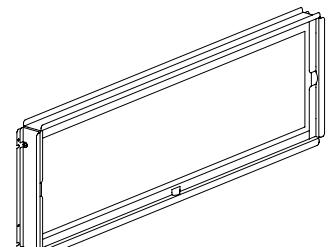
Support feet for a vertical installation, complete with a pipe cover (for MVP-MXP versions), RAL9003 colour with a matte finish.

**Yardy - Built-in ductable versions IVP - IVF - IXP - CXP****Plenum and fittings**

- **KFGCM** duct frame
Flanged frame for connection to the flow duct.
- **KFGCA** duct frame
Flanged frame for connection to the intake duct.

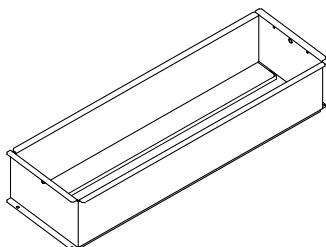


- **KFAC Filter holder frame**



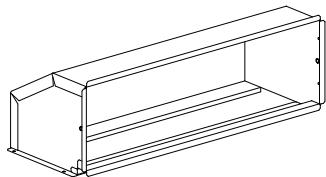
- KRDM (supplied separately)

Outlet straight connection made of galvanised sheet metal.



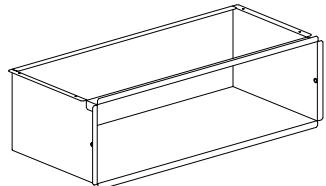
- KR9M (supplied separately)

Outlet 90° connection made of galvanised sheet metal.



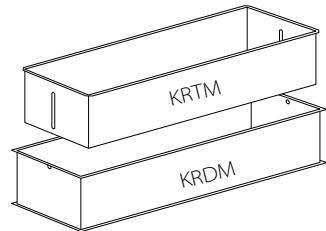
- KR9A (supplied separately)

Inlet 90° connection made of galvanised sheet metal.



- KRTM (supplied separately)

Telescopic fitting (adjustable length between 21 and 86 mm) in delivery/intake made of galvanised sheet steel, for connection to fittings KRDM, KR9M and KR9A only.

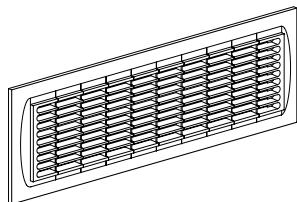


- KGFW (supplied separately)

Suction grille made of heat-resistant ABS polymer, RAL7035 colour, and pre-painted sheet metal, RAL9003 colour, with a polypropylene filter for KRDM, KR9M, KR9A, KRTM fittings (for IVP - IVF - IXP versions).

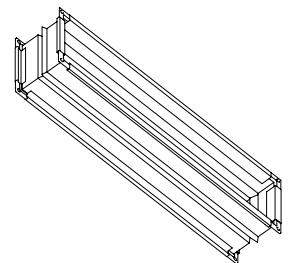
- KGW (supplied separately)

Delivery grille made of heat-resistant ABS polymer, RAL7035 colour, and pre-painted sheet metal, RAL9003 colour, for KRDM, KR9M, KR9A, KRTM fittings (for IVP - IVF - IXP versions).



- KAS Antivibration joint

Antivibration connection for connection to the inlet or outlet duct (to be used with KFGCm-KFGCA).



- KCASE - Casing for recessed wall or false ceiling installation (supplied separately - only for IVP, IXP, CXP)

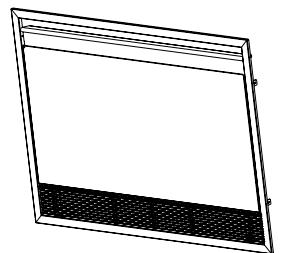
Galvanised sheet steel casing to install the fan coil in a recessed wall or false ceiling installation, equipped with pre-cut holes to pass the pipes, support feet of the unit and anti-intrusion grille.



	Width mm	920	1125	1325
Yardy-I EV3	Model	20 - 24	30 - 34	45 - 48
Yardy EV3	Model	20 - 24	25 - 30 - 34	40 - 45 - 48
Yardy-ID2	Model			40 - 48
Yardy-DUCT2	Model			40 - 48

- KPVCASE - COVER aesthetic panel for a wall-mounted casing, with an air delivery and return grille (supplied separately - only for IVP, IXP versions with KCASE)

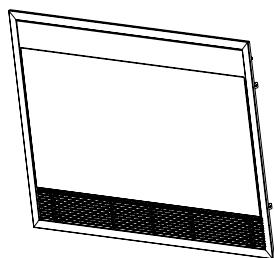
Wall-mounted aesthetic panel for casing, with a frame, intake grille and swivel delivery fin 180°, matte white RAL 9003 colour.



	Width mm	920	1125	1325
Yardy-I EV3	Model	20 - 24	30 - 34	45 - 48
Yardy EV3	Model	20 - 24	25 - 30 - 34	40 - 45 - 48

- KPXCASE - COVER** aesthetic panel for a casing, with an air inlet grille (supplied separately - only for IVP, IXP, CXP versions with KCASE and KRDM - KRTM fittings)

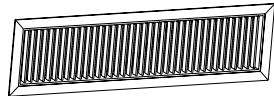
Wall or ceiling-mounted aesthetic panel for casing, with a frame and intake grille, matte white RAL 9003 colour.



	Width mm	920	1125	1325
Yardy-I EV3	Model	20 - 24	30 - 34	45 - 48
Yardy EV3	Model	20 - 24	25 - 30 - 34	40 - 45 - 48
Yardy-ID2	Model			40 - 48
Yardy-DUCT2	Model			40 - 48

- KGMD - Aluminium delivery nozzle** (supplied separately - only for IVP, IXP versions with KRDM - KRTM fittings)

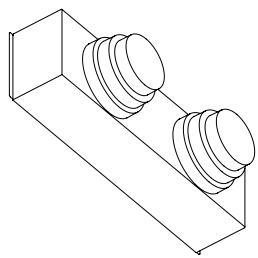
Aluminium wall-mounted delivery nozzle, with a double row of adjustable fins.



	Width mm	920	1125	1325
Yardy-I EV3	Model	20 - 24	30 - 34	45 - 48
Yardy EV3	Model	20 - 24	25 - 30 - 34	40 - 45 - 48
Yardy-ID2	Model			40 - 48
Yardy-DUCT2	Model			40 - 48

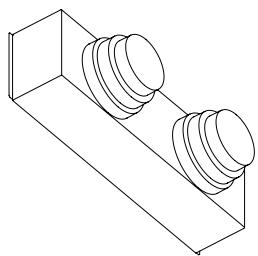
- KPAF (supplied separately)**

Intake plenum made of galvanised sheet metal with circular nozzles made of embossed ABS polymer (\varnothing 150-180-200 mm).



- KPM (supplied separately)**

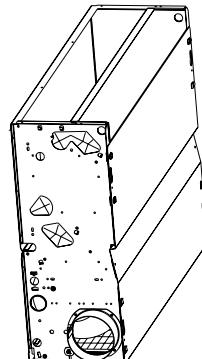
Flow plenum made of galvanised sheet metal, insulated internally, with circular nozzles made of embossed ABS polymer (\varnothing 150-180-200 mm).



- Return air flange (factory fitted)**

\varnothing 10cm – Air inlet hole on the wiring side (only for IXP-IVP-IVF-CXP versions)

\varnothing 12cm - Air inlet hole on the hydraulic connections side (only horizontal installation IXP-CXP version)



1.7 Controls

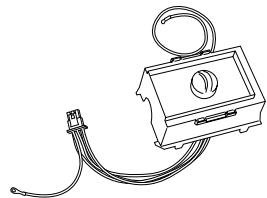
The Yardy range includes a number of commands and controls supplied separately by the units or pre-assembled at the factory

Standard controls

Yardy-EV3 version MVP-MVT

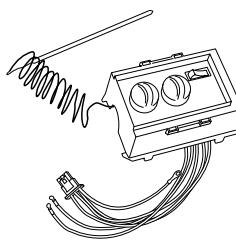
- KC** (supplied separately)
- C** (factory fitted)

OFF/1/2/3 speed switch (for MVP and MVT). On board installation only.



- KTA** (supplied separately)
- TA** (factory fitted)
- TATM** (factory fitted)

Room thermostat complete with OFF/1/2/3 speed and SUMMER/WINTER switch (for MVP and MVT) with the possibility of connecting the minimum thermostat externally. On board installation only. The TATM version is supplied complete with the minimum thermostat.



Yardy-EV3 - YardyDUCT2**• KCV2 (supplied separately)**

Panel with 3-speed switch complete with the summer/off/winter switch with the possibility of connecting the minimum thermostat externally. Wall mounted.

(dimensions 145 x 82 x 40 mm)



- **KTCV2-KBTCV2** (supplied separately)
- **TCV2-TCV2TM** (factory fitted)

Control and regulation panel consisting of: off/continuous ventilation/thermostat ventilation switch; room thermostat; summer/winter switch; speed switch; auxiliary contacts (230 Vac) to control the On/Off valves in 2-pipe systems, 2-pipe systems with electric resistance (KRER) or 4-pipe systems with the possibility of connecting the minimum thermostat externally. Installed on board the machine (KTCV2) or on the wall (KTCV2).

The TCV2TM control is supplied complete with the minimum thermostat.

(dimensions 145 x 82 x 40 mm)



- **KTCVA-KBTCVA** (supplied separately)
- **TCVA** (factory fitted)

Electronic control panel including: thermostated ventilation/off/continuous ventilation switch; 3-speed switch; room thermostat; automatic summer/winter switch; red/green heating/cooling operating LED; auxiliary contact (230 Vac) for ON/OFF 3-way valve control for 2-pipe systems. On board machine assembly (KTCVA) or wall-mounted (KTCVA).

NOTE: the control does not work with a 2-way valve.



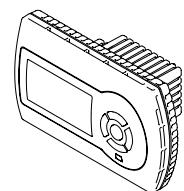
- **KTCVR-KBTCVR** (supplied separately)
- **TCVR** (factory fitted)

Electronic control panel including: on/off/electrical resistance switch; automatic summer/winter switchover; automatic speed/minimum speed switch; comfort ±5°C adjustment knob; auxiliary contacts (230 Vac) to control the ON/OFF 3-way valve in 2-pipe systems and 2-pipe systems with electrical resistance (KRER); auxiliary contacts (230 Vac) to control the ON/OFF 3 or 2-way valve in 4-pipe systems. Minimum thermostat function, destratification cycle and dirty filter signal (Yardy only). On-board assembly (KTCVR) or wall-mounted (KTCVR).

NOTE: the control does not work with a 2-way valve (dimensions 145 x 82 x 40 mm)

**• KTVD-KTVDM (supplied separately)****KTVD**

Electronic control panel with display, semi-recessed wall mounting installation, including an ON/OFF, MODE, 3-speed+AUTO button, SET-POINT or delta SET-POINT change (OFFSET +/-3°C); auxiliary contacts for ON/OFF control valve in 2-pipe systems (2T) with electrical resistance (KRER) and 4-pipe systems (4T); summer/winter manual/automatic/contact switching; fan or minimum thermostat with probe start-up delay (KSO); continuous/thermostatic ventilation; configurable digital inputs (SCR, ECO, SIC and ALARM), weekly time band control; control of up to 4 units with INT interface. Fixing in 503-type three module recessed boxes (not supplied by Rhoss);

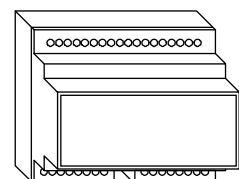
**KTVDM**

Complete with resident RS485 serial interface (Modbus RTU protocol)

(dimensions 128 x 80 x 55.5 mm)

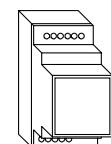
• INT (supplied separately)

Interface board to control up to 4 fan coils, to be used in conjunction with KC, KCV2, KTCV2, KTCVA, KTCVR and KTV (M) type of controls. On board installation.

**Yardy-I EV3 - YardyID2****• KADC (supplied separately)**

Analogue digital signal converter to manage Inverter fan coils via commands with a 3-speed relay.

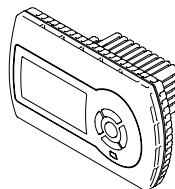
(dimensions 35 x 90 x 65,5 mm)



- KTVDI-KTVDIM (supplied separately)**

KTVDI

Electronic control panel with display, semi-recessed wall mounting installation, including an ON/OFF, MODE, 3-speed+AUTO button, SET-POINT or delta SET-POINT change (OFFSET +/-3°C); fan control (0-10 Vdc); auxiliary contacts for ON/OFF control valve in 2-pipe systems (2T) with electrical resistance (KRER) and 4-pipe systems (4T); summer/winter manual/automatic/contact switching; fan or minimum thermostat with probe start-up delay (KSO); continuous/thermostatic ventilation; configurable digital inputs (SCR, ECO, SIC and ALARM), weekly time band control; control of up to 4 units (max 50 m shielded cable). Fixing in 503-type three module recessed boxes (not supplied by Rhoss);

**KTVDIM**

Complete with resident RS485 serial interface (Modbus RTU protocol)

(dimensions 128 x 80 x 55.5 mm)

Yardy EV3 - YardyDuct2 - Yardy-I EV3 - YardyID2

- KSO (supplied separately)**

Remote air temperature probe (2m) for KTCV2, KTCVA, KTCVR, KTVD (M) and minimum thermostat for KTVD (M) and KTVDI(M).



- KTM (supplied separately)**

Minimum temperature thermostat for winter operation (for KTA - KCV2-KTCV2 - KBTCV2).



1.8 Advanced controls LIT-Touch

- KPLTB** - Glossy black LIT-Touch wired control panel (supplied separately)
- KPLTW** - Pearl white LIT-Touch wired control panel (supplied separately)



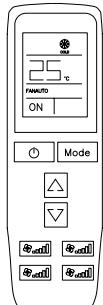
Only combined with control (K)CF/P.

Dimensions 120x86x17 mm

- **KTLT** - LIT-Touch remote control (supplied separately)

IR LIT-Touch remote control to control remotely with KRLT receiver, complete with a wall-mounting support. Only combined with the KRLT receiver and control (K)CF/P.

Dimensions 60 x 160 x 30 mm

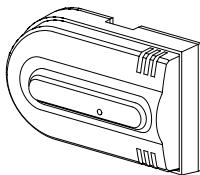


- **KRLT** - LIT-Touch receiver (supplied separately)

IR LIT-Touch receiver to control remotely with the KLT remote control, complete with an ambient air temperature probe, operating mode LED and emergency micro-key in the case of no remote control. Wall mounting installation.

Only combined with the control (K)CF/P.

Dimensions 95 x 58 x 30 mm



- **CF/B** - LIT-Touch control with on board control (factory fitted)
- **KCF/B** - LIT-Touch control with on-board control (supplied separately)

On board control complete with a LED display to view the ambient temperature or desired set-point and keys to set the ambient set-point, the speed of the fan (AUTO, MIN, MED, MAX) and the summer/winter manual/automatic operating mode and the fan (OFF/E/I/Auto/Fan).

On board electronic control complete with an air temperature probe, minimum water temperature probe and auxiliary relay contacts to control the ON/OFF valves in 2-pipe systems, and 2-pipe systems with an electrical resistance or in 4-pipe systems.

Continuous 0-10 Vdc speed adjustment for fan coils with an EC-Inverter motor or 3-speed adjustment for fan coils with an AC motor; continuous/thermostated fan speed via parameters.

Set-point adjustment or limited with delta set-point (+/-3°C can be varied with respect to a reference value, for restricted hotel room operation.

In heating mode in 2-pipe systems, the control for the additional valve can be configured for thermostated activation of a radiator or a radiant panel, with joint or separate operation to the main coil of the fan coil.

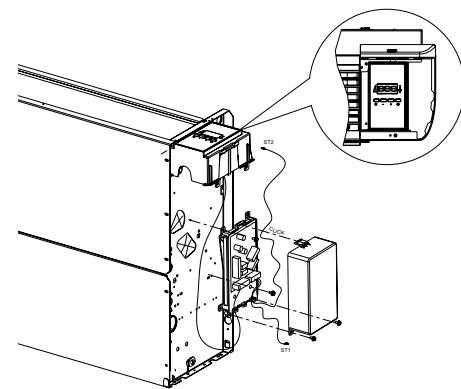
Integrated slave master control up to 15 in total units from a single unit with control (K)CF/B.

3 digital inputs, configurable as remote ON/OFF, remote summer/winter, economy, window contact, general alarm in unit input.

The control consists of an electronic board inside a plastic container (IP21), which can contain any additional components:

- **KDO2/DO2** - Additional board with 2 digital relay outputs, can be configured as ON/OFF call, summer/winter call, unit alarm. KIF485/SS - RS485 serial board with unit addressing from control panel or remote control.

On board installation - for MVP, MVT version.



- **CF/P** - LIT-On board touch control (factory fitted)
- **KCF/P** - On board LIT-Touch control (supplied separately)

On board electronic control complete with a minimum water temperature probe and relay auxiliary contacts to control the ON/OFF valves in 2-pipe systems, in 2-pipe systems with an electrical resistance or in 4-pipe systems.

Continuous 0-10 Vdc speed adjustment for fan coils with an EC-Inverter motor or 3-speed adjustment for fan coils with an AC motor; continuous/thermostated fan speed via parameters.

Set-point adjustment or limited with delta set-point (+/-3°C can be varied with respect to a reference value, for restricted hotel room operation.

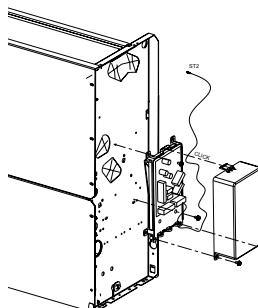
In heating mode in 2-pipe systems, the control for the additional valve can be configured for thermostated activation of a radiator or a radiant panel, with joint or separate operation to the main coil of the fan coil.

Integrated master slave control up to 15 in total units, from a single unit with control (KCF/B or KPLT panel or KRLT receiver). 3 digital inputs, configurable as remote ON/OFF, remote summer/winter, economy, window contact, general alarm in unit input.

The control consists of an electronic board inside a plastic container (IP21), which can contain any additional components:

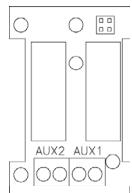
- **KDO2/DO2** - Additional board with 2 digital relay outputs, can be configured as ON/OFF call, summer/winter call, unit alarm.
- **KSTA1/STA1** - On board air temperature probe - KIF485/SS - RS485 serial board with unit addressing from control panel or remote control.

On board installation - for all versions, only combined with a KPLT panel or KRLT receiver.



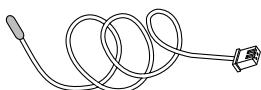
- **DO2** - Board with 2 digital outputs
- **KDO2** - Board with 2 digital outputs (supplied separately)

Additional board with 2 digital relay outputs, which can be configured as ON/OFF call, summer/winter call, unit alarm On board installation on control (K)CF/..



- **STA1** - On board air temperature probe (factory fitted)
- **KSTA1** - On board air temperature probe (supplied separately)

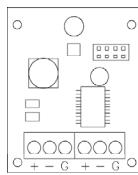
On board air temperature probe, in alternate operation with the working probe on the KPLT Panel or on the KRLT Receiver. On board installation on control (K)CF/P.



1.9 Serial interfaces for LIT-Touch evolved controls

- **SS** - RS485 serial board to control CF/.. (factory fitted)
- **KIF485** - RS485 serial board to control KCF/.. (supplied separately)

RS485 serial interface board for SYS-TO (System Touch Manager) by Rhoss or third-party supervision (Protocols supported: Modbus® RTU).



1.10 Gateway

- **KGTW-BAC**

RS485/BACnet gateway for communication from MODBUS RTU to BACNET IP; up to 32 fan coils can be connected. The fan coils must be equipped with an SS serial interface (KIF485).

- **KGTW-LON**

RS485/FTT10-LonWorks gateway for communication from MODBUS RTU to FTT10-LonWorks; up to 32 fan coils can be connected. The fan coils must be equipped with an SS serial interface (KIF485).

Note: For more information on Commands and Controls and for the connection wiring diagrams, refer to the Technical Note Code K20002.

2. Functioning limits

Water inlet temperature: 3÷90°C.
Maximum exchanger pressure: 6 bar.
Power supply voltage: 230Vac ±10% 1ph 50Hz.

Nota Bene

The machine complies with the EN 1397 directive regarding the condensation test, however the following precautions are recommended:

Units in operation: in the summer time with chilled water, the unit must not operate continuously in environments with relative humidity (RH) >78%
Unit off: in the summer time with chilled water, in environments with an air temperature >27°C and relative humidity (RH) >78%, do not keep the unit switched off continuously for more than 4 hours, with the inlet water temperature lower than 6°C.

In the above conditions, there is a risk that superficial condensation could form, which could damage objects below it, the floor or the wall to which the unit is attached.

Said limits refer to operations with the fan in motion at minimum speed. In the event of a prolonged situation with the fan off and the passage of cold water in the battery, it is possible the formation of condensation on the outside of the unit, so it requires the insertion of the accessory valve 3-way or 2-way.

3. Technical Data

YARDY-EV3			15	20	24	25	30	34	40	45	48	55	58	60	74	80	88
Nominal cooling capacity EN 1397 (total heat) (*)	kW	VI	1,12	1,98	2,20	2,50	3,21	3,28	3,72	4,26	4,76	5,38	5,90	6,53	6,99	7,82	8,25
		V	1,04	1,76	2,10	2,24	2,80	3,05	3,36	3,84	4,46	4,86	5,26	6,09	6,48	7,52	7,93
		IV	0,97	1,53	1,87	2,02	2,57	2,81	2,84	3,31	3,57	4,40	4,76	5,42	6,01	7,12	7,39
		III	0,89	1,37	1,68	1,69	2,46	2,55	2,63	2,99	3,35	3,90	4,24	5,26	5,68	6,77	7,32
		II	0,77	1,18	1,45	1,62	2,07	2,25	2,47	2,81	3,11	3,34	3,57	4,40	5,05	6,31	6,83
		I	0,64	1,13	1,35	1,38	1,78	1,98	2,06	2,49	2,85	2,69	3,04	4,22	4,63	6,24	6,49
Nominal cooling capacity EN 1397 (sensitive heat) (*)	kW	VI	0,91	1,63	1,78	2,00	2,49	2,58	2,84	3,44	3,39	4,36	4,67	5,02	5,65	6,33	6,39
		V	0,79	1,36	1,61	1,75	2,07	2,37	2,52	3,22	3,16	3,79	4,17	4,72	5,20	6,01	6,11
		IV	0,77	1,28	1,46	1,57	1,97	2,17	2,09	2,57	2,51	3,35	3,73	4,04	4,78	5,69	5,65
		III	0,71	1,02	1,29	1,30	1,84	1,95	1,97	2,24	2,33	2,84	3,17	3,88	4,33	5,30	5,53
		II	0,57	0,96	1,08	1,19	1,55	1,70	1,77	1,99	2,14	2,54	2,59	3,24	3,69	5,00	5,11
		I	0,47	0,84	0,97	1,01	1,28	1,49	1,53	1,78	1,98	2,00	2,22	3,09	3,25	4,68	4,74
Water flow rate (*)	l/h	VI	199	347	384	436	561	573	651	743	831	942	1037	1148	1229	1373	1451
		V	186	309	366	390	489	534	587	669	778	850	924	1068	1134	1320	1392
		IV	172	268	324	352	448	489	495	575	620	769	834	951	1052	1246	1294
		III	158	239	292	293	427	443	457	520	582	682	742	923	995	1184	1281
		II	136	206	252	282	361	391	429	488	539	582	623	771	884	1104	1195
		I	113	196	234	241	309	343	359	433	494	469	529	740	812	1092	1135
Water pressure drops (*)	kPa	VI	15,0	12,9	21,0	17,5	11,0	11,4	19,1	20,0	20,5	19,6	11,0	9,5	9,0	17,0	18,3
		V	13,3	10,5	19,0	14,3	9,4	10,0	18,3	16,6	18,0	16,2	9,0	8,3	8,0	15,8	16,9
		IV	10,3	8,1	15,4	11,1	8,0	8,6	13,8	13,0	13,5	15,8	7,5	6,9	7,0	10,0	10,8
		III	9,0	6,5	12,2	8,0	7,3	7,3	12,0	10,9	12,0	12,7	6,2	6,2	9,1	9,8	
		II	7,6	5,7	10,1	6,9	6,8	5,8	10,0	11,5	10,0	9,3	5,4	6,2	5,4	7,5	8,0
		I	5,5	5,2	8,8	5,2	5,7	4,7	7,2	9,3	9,0	6,3	5,3	5,7	5,3	7,4	7,9
Heating capacity EN 1397 (input water 45°C) (**)	kW	VI	1,38	2,26	2,36	2,97	3,59	3,77	4,38	4,68	4,89	6,13	7,18	7,53	7,89	8,71	10,04
		V	1,21	1,97	2,05	2,68	3,29	3,44	3,79	4,27	4,45	5,45	6,74	7,03	7,37	8,25	9,60
		IV	1,08	1,62	1,73	2,30	2,85	2,98	3,23	3,47	3,64	4,89	5,93	6,20	6,48	8,16	9,12
		III	1,06	1,47	1,52	1,94	2,66	2,79	2,98	3,20	3,34	4,13	5,81	6,02	6,29	7,80	9,00
		II	0,92	1,26	1,44	1,85	2,26	2,35	2,77	2,81	2,93	3,57	5,12	5,29	5,50	7,13	8,22
		I	0,70	1,24	1,28	1,56	2,02	2,19	2,52	2,59	2,69	2,94	4,61	4,71	4,91	7,05	8,15
Water flow rate (**)	l/h	VI	230	382	399	503	606	638	740	793	828	1035	1210	1267	1328	1466	1693
		V	202	333	346	456	557	582	642	724	754	921	1138	1187	1245	1390	1619
		IV	180	273	292	392	484	506	547	589	618	827	1002	1046	1092	1379	1542
		III	178	250	259	330	451	474	506	544	568	698	984	1016	1062	1319	1523
		II	155	213	245	315	384	400	471	479	499	604	869	893	928	1204	1391
		I	117	210	217	266	342	373	428	441	457	499	784	794	828	1193	1380
Water pressure drops (**)	kPa	VI	17,9	14,3	18,3	20,8	11,6	13,1	22,2	20,7	19,4	21,3	13,9	10,5	9,9	18,5	18,9
		V	14,2	11,1	14,0	17,4	10,9	11,1	19,7	17,5	16,2	17,2	14,0	9,3	9,0	16,6	14,3
		IV	10,4	7,8	11,3	12,4	8,4	8,7	15,1	12,5	12,7	16,6	12,6	7,5	7,2	11,5	11,1
		III	8,4	6,5	9,3	9,1	7,4	7,8	13,1	10,9	10,9	12,2	11,5	7,0	6,6	10,7	10,0
		II	7,7	5,5	9,1	7,8	5,7	5,7	10,9	10,3	8,3	9,1	8,6	7,4	5,6	8,5	8,7
		I	4,5	5,4	7,4	5,7	4,6	5,2	9,2	8,9	7,5	6,5	8,5	6,0	5,2	8,4	8,7
Heating capacity (input water 50°C) (***)	kW	VI	1,59	2,65	2,78	3,47	4,21	4,42	5,11	5,51	5,79	7,17	8,34	8,78	9,22	10,19	11,68
		V	1,40	2,31	2,43	3,14	3,85	4,04	4,45	5,03	5,28	6,39	7,81	8,22	8,63	9,67	11,17
		IV	1,25	1,91	2,06	2,71	3,36	3,53	3,79	4,11	4,32	5,74	6,89	7,25	7,61	9,55	10,62
		III	1,23	1,74	1,83	2,28	3,14	3,30	3,50	3,79	3,98	4,87	6,69	7,04	7,39	9,13	10,49
		II	1,07	1,49	1,72	2,18	2,67	2,80	3,26	3,35	3,52	4,22	5,85	6,16	6,47	8,35	9,60
		I	0,82	1,46	1,53	1,84	2,37	2,59	2,93	3,08	3,23	3,47	5,24	5,52	5,80	8,27	9,49
Water flow rate (***)	l/h	VI	199	347	384	436	561	573	651	743	831	942	1037	1148	1229	1373	1451
		V	186	309	366	390	489	534	587	669	778	850	924	1068	1134	1320	1392
		IV	172	268	324	352	448	489	495	575	620	769	834	951	1052	1246	1294
		III	158	239	292	293	427	443	457	520	582	682	742	923	995	1184	1281
		II	136	206	252	282	361	391	429	488	539	582	623	771	884	1104	1195
		I	113	196	234	241	309	343	359	433	494	469	529	740	812	1092	1135
Water pressure drops (***)	kPa	VI	13,8	12,0	17,1	16,1	10,1	10,8	17,6	18,4	19,5	18,0	10,5	8,8	8,6	16,4	14,3
		V	12,2	9,7	15,4	13,1	8,6	9,5	16,8	15,							

YARDY-EV3				15	20	24	25	30	34	40	45	48	55	58	60	74	80	88
Water flow rate (*****)	l/h	VI	232	385	401	507	611	642	746	797	833	1043	1219	1278	1339	1479	1706	
		V	203	335	348	459	561	586	648	728	758	929	1147	1197	1254	1402	1631	
		IV	181	276	294	394	487	510	552	593	621	834	1009	1055	1101	1390	1554	
		III	179	252	261	332	455	479	510	547	572	704	991	1024	1072	1330	1534	
		II	156	217	247	318	387	407	476	481	504	612	876	900	942	1214	1402	
		I	119	214	220	269	347	380	432	444	464	510	793	804	847	1202	1390	
Water pressure drops (*****)	kPa	VI	18,2	14,5	18,5	21,1	11,8	13,3	22,5	20,9	19,6	21,6	14,1	10,7	10,0	18,7	19,1	
		V	14,4	11,2	14,1	17,6	11,0	11,2	20,0	17,7	16,3	17,5	14,2	9,5	9,1	16,8	14,5	
		IV	10,5	7,9	11,4	12,5	8,5	8,8	15,4	12,7	12,9	16,9	12,8	7,6	7,3	11,7	11,3	
		III	8,5	6,6	9,5	9,2	7,5	7,9	13,3	11,0	11,0	12,4	11,6	7,1	6,7	10,8	10,1	
		II	7,8	5,7	9,3	8,0	5,8	5,9	11,1	10,4	8,4	9,3	8,7	7,5	5,7	8,7	8,8	
		I	4,6	5,6	7,5	5,9	4,7	5,4	9,3	9,0	7,7	6,7	8,7	6,2	5,4	8,6	8,8	
Nominal heating capacity EN 1397 additional coil KB4 (65°C) (*****)	kW	VI	1,28	2,09	1,78	2,70	3,20	3,05	3,59	3,50	3,34	5,46	5,13	5,70	5,45	6,51	6,27	
		V	1,14	1,92	1,69	2,60	2,69	2,57	2,94	3,38	3,21	5,13	5,00	5,56	5,30	6,46	6,20	
		IV	1,11	1,80	1,46	2,28	2,60	2,48	2,85	2,96	2,82	4,60	4,68	5,21	4,96	6,35	6,07	
		III	0,96	1,51	1,34	2,00	2,28	2,18	2,81	2,78	2,63	4,23	4,34	4,91	4,62	5,90	5,92	
		II	0,90	1,40	1,20	1,84	2,15	2,04	2,75	2,73	2,59	3,58	3,72	4,71	3,96	5,70	5,75	
		I	0,79	1,29	1,16	1,66	1,93	1,82	2,62	2,21	2,15	3,12	3,22	4,22	3,53	5,30	5,28	
Water flow rate additional coil KB4 (*****)	l/h	VI	107	176	149	228	270	257	303	295	280	460	429	477	454	544	522	
		V	95	162	143	221	227	216	248	286	270	433	420	467	444	540	517	
		IV	93	153	124	194	221	210	241	251	238	388	394	438	415	534	509	
		III	80	128	114	170	193	185	239	236	223	358	366	413	387	496	497	
		II	75	119	102	156	182	173	234	232	220	304	314	397	332	479	483	
		I	67	109	98	142	164	155	223	187	183	265	273	355	295	446	444	
Pressure drops additional coil KB4 (*****)	kPa	VI	2,0	6,0	5,0	10,0	12,6	12,6	4,7	3,1	4,8	14,9	8,8	9,4	9,4	27,2	14,5	
		V	1,8	5,7	4,5	8,7	10,9	11,0	4,5	3,0	4,4	12,1	7,6	8,3	8,3	24,5	13,5	
		IV	1,7	4,8	3,7	7,5	8,1	8,2	3,1	2,1	3,2	10,9	7,2	8,0	8,0	22,4	13,0	
		III	1,3	4,0	3,3	5,4	7,0	7,0	2,8	1,7	2,9	9,0	6,8	7,8	7,8	20,1	12,3	
		II	1,1	3,3	2,4	5,2	5,9	5,9	2,4	1,7	2,5	8,3	6,3	9,3	7,2	18,5	11,0	
		I	0,8	2,7	2,2	4,1	4,9	4,9	2,3	1,3	2,3	6,9	5,7	6,8	6,8	16,3	6,0	
Nominal heating capacity EN 1397 additional coil KB4 (70°C) (*****)	kW	VI	1,49	2,37	2,01	3,06	3,62	3,45	4,18	3,98	3,79	6,20	5,81	6,45	6,15	7,36	7,08	
		V	1,33	2,20	1,93	2,95	3,04	2,90	3,46	3,84	3,66	5,83	5,66	6,29	5,98	7,31	7,01	
		IV	1,29	2,09	1,70	2,59	2,95	2,80	3,36	3,46	3,27	5,22	5,30	5,90	5,61	7,20	6,86	
		III	1,12	1,75	1,56	2,27	2,58	2,46	3,33	3,25	3,07	4,84	4,92	5,57	5,23	6,69	6,70	
		II	1,04	1,63	1,40	2,12	2,43	2,31	3,26	3,20	3,02	4,16	4,25	5,34	4,48	6,46	6,51	
		I	0,91	1,50	1,34	1,92	2,19	2,06	3,07	2,59	2,53	3,63	3,73	4,78	3,99	6,02	5,98	
Water flow rate additional coil KB4 (*****)	l/h	VI	125	200	169	259	306	291	353	336	319	523	487	541	514	617	592	
		V	111	186	163	251	257	244	292	325	309	493	476	530	503	614	586	
		IV	108	177	144	220	250	237	285	294	278	442	447	497	471	607	577	
		III	94	149	132	193	219	209	284	276	261	410	416	469	439	564	564	
		II	88	138	119	181	206	196	278	273	257	353	360	451	377	545	549	
		I	77	127	114	163	186	175	261	220	215	309	317	403	334	507	504	
Pressure drops additional coil KB4 (*****)	kPa	VI	2,7	7,6	6,3	12,6	15,8	15,8	6,2	3,9	6,0	18,8	11,0	11,8	11,8	34,2	18,1	
		V	2,4	7,3	5,7	10,9	13,7	13,7	6,0	3,8	5,6	15,3	9,5	10,4	10,4	30,8	16,9	
		IV	2,2	6,3	4,8	9,4	10,2	10,2	4,2	2,8	4,2	13,8	9,0	10,1	10,1	28,2	16,3	
		III	1,7	5,2	4,4	6,8	8,8	8,8	3,8	2,3	3,8	11,5	8,5	9,8	9,8	25,3	15,5	
		II	1,5	4,3	3,1	6,7	7,4	7,4	3,3	2,3	3,3	10,9	8,0	11,7	9,0	23,4	13,8	
		I	1,1	3,5	2,9	5,3	6,1	6,1	3,1	1,7	3,1	9,1	7,5	8,6	8,6	20,6	7,6	
Electric heater	kW 230V 1ph-50Hz	0,5	0,5	0,5	1,0	1,0	1,0	2,0	2,0	2,0	3,0	3,0	3,0	3,0	3,0	3,0	3,0	
Air flow rate	m³/h	VI	229	339	339	484	547	547	676	681	681	1077	1077	1235	1235	1480	1480	
		V	209	288	288	405	483	483	587	627	627	916	916	1109	1109	1388	1388	
		IV	183	238	238	339	434	434	472	474	474	802	802	948	948	1220	1220	
		III	163	207	207	281	383	383	419	431	431	662	662	882	882	1171	1171	
		II	138	177	177	252	329	321	390	392	392	537	537	757	757	1031	1031	
		I	100	155	155	217	281	281	365	338	338	420	420	672	672	994	994	
Fans	n°	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3		
Sound power	dB(A)	VI	46	48	48	48	50	50	51	52	52	58	58	62	62	66	66	
		V	43	44	44	42	46	4										

YARDY-EV3				15	20	24	25	30	34	40	45	48	55	58	60	74	80	88
Absorbed power	W	VI	40	40	41	45	60	65	72	70	76	115	145	161	172	184	197	
		V	39	36	32	34	54	58	58	61	66	95	122	130	133	173	185	
		IV	31	26	25	26	36	39	42	41	44	81	102	117	125	142	152	
		III	28	23	21	22	31	33	34	36	39	66	83	109	117	133	142	
		II	23	17	16	17	28	27	33	31	33	51	64	95	102	124	133	
		I	17	15	14	16	25	22	28	28	30	41	44	92	98	116	124	
Absorbed current	A	VI	0,19	0,17	0,18	0,20	0,25	0,27	0,32	0,31	0,33	0,51	0,55	0,71	0,76	0,82	0,88	
		V	0,14	0,13	0,14	0,14	0,24	0,15	0,25	0,26	0,28	0,40	0,43	0,46	0,56	0,72	0,77	
		IV	0,11	0,10	0,11	0,11	0,16	0,12	0,18	0,17	0,18	0,36	0,41	0,52	0,49	0,60	0,64	
		III	0,10	0,08	0,09	0,95	0,13	0,10	0,17	0,16	0,17	0,27	0,29	0,45	0,48	0,59	0,63	
		II	0,08	0,06	0,06	0,07	0,11	0,08	0,15	0,13	0,14	0,21	0,29	0,42	0,45	0,52	0,56	
		I	0,06	0,05	0,05	0,06	0,08	0,06	0,12	0,14	0,15	0,21	0,23	0,47	0,45	0,51	0,55	
Electrical supply	V-ph-Hz																230-1-50	
Width MXP-MXT-MVP-MVT	mm	700	800	800	1000	1000	1000	1200	1200	1200	1500	1500	1500	1500	1500	1500	1500	
Height x Depth MXP-MXT- MVP-MVT																	570 x 220	
Width IXP-IVP-IVF	mm	450	550	550	750	750	750	950	950	950	1250	1250	1250	1250	1250	1250	1250	
Height x Depth IXP-IVP-IVF	mm																545 x 212	
Height of feet	mm																100	
Weight MXP-MXT-MVP-MVT	kg	16,0	20,0	20,5	20,0	21,0	22,0	27,0	28,0	29,0	35,0	35,0	35,0	36,0	37,0	38,0		
Weight IXP-IVP-IVF	kg	14,5	16,5	17,0	20,5	20,5	21,5	24,0	25,5	27,0	34,5	34,5	34,5	35,5	36,5	37,5		
Standard coil connections / additional coil KB4																	¾ G (F) / ½ G (F)	
Condensate drain connection (Ø)	mm																16	

- (*) In the following conditions: room temperature 27°C D.B; 19°C W.B.; input water temperature 7°C with Δt 5°C.
- (**) In the following conditions: room temperature 20°C; input water temperature 45°C with Δt 5°C
- (***) In the following conditions: room temperature 20°C; input water temperature 50°C, water flow rate as in cooling
- (****) In the following conditions: room temperature 20°C; input water temperature 70°C with Δt 10°C
- (***** In the following conditions: room temperature 20°C; input water temperature 65°C with Δt 10°C
- (***** Sound pressure level expressed in dB(A) for an environmental volume of 100 m³ and echo time = 0.5 sec.

N.B. Data in bold refer to the Max / Med / Min wired speeds wired in a terminal block and Eurovent certified

YARDY-I-EV3				20	24	30	34	45	48	60	74	80	88
Nominal cooling capacity EN 1397 (total heat) (*)	kW	10 Vdc	Max	1,86	2,24	2,97	3,37	4,11	4,60	6,28	7,33	7,94	8,40
		6 Vdc	Med	1,44	1,68	2,33	2,75	3,05	3,49	4,60	5,24	5,87	6,32
		1 Vdc	Min	0,75	0,80	1,08	1,34	1,53	1,73	1,78	2,10	2,10	2,25
Nominal cooling capacity EN 1397 (sensitive heat) (**)	kW	10 Vdc	Max	1,46	1,75	2,34	2,68	3,29	3,63	4,89	5,89	6,44	6,56
		6 Vdc	Med	1,14	1,31	1,77	2,14	2,36	2,56	3,49	4,07	4,47	4,86
		1 Vdc	Min	0,52	0,58	0,76	0,97	1,13	1,26	1,27	1,56	1,64	1,75
Water flow rate (*)	l/h	10 Vdc	Max	323	388	515	584	712	797	1093	1274	1387	1467
		6 Vdc	Med	249	290	402	476	525	601	795	905	1016	1095
		1 Vdc	Min	130	139	187	232	264	299	307	362	362	388
Water pressure drops (*)	kPa	10 Vdc	Max	12,5	21,0	11,3	13,0	18,5	20,0	9,5	11,6	20,9	22,0
		6 Vdc	Med	7,7	15,3	7,1	9,0	12,1	15,0	5,4	6,4	8,4	8,4
		1 Vdc	Min	2,6	4,4	1,9	3,0	4,2	4,4	1,3	2,0	1,3	2,0
Heating capacity EN 1397 (input water 45°C) (**)	kW	10 Vdc	Max	2,10	2,18	3,27	3,41	4,47	4,65	7,13	7,41	9,67	10,07
		6 Vdc	Med	1,48	1,57	2,52	2,60	3,13	3,27	5,12	5,31	7,15	7,43
		1 Vdc	Min	0,77	0,81	1,20	1,26	1,50	1,57	1,88	1,94	2,63	2,74
Water flow rate (**)	l/h	10 Vdc	Max	356	371	558	582	763	792	1210	1258	1639	1706
		6 Vdc	Med	253	267	430	444	536	559	876	908	1220	1267
		1 Vdc	Min	131	139	205	215	257	268	323	333	450	470
Water pressure drops (**)	kPa	10 Vdc	Max	13,9	18,4	12,0	12,3	19,3	18,8	10,6	10,8	28,2	28,9
		6 Vdc	Med	7,3	12,5	7,4	7,6	11,5	12,5	6,0	6,1	10,7	10,4
		1 Vdc	Min	2,4	4,2	2,0	2,5	3,7	3,4	1,3	1,6	1,8	2,7
Heating capacity (input water 50°C) (***)	kW	10 Vdc	Max	2,47	2,60	3,87	4,07	5,30	5,54	8,38	8,81	11,29	11,77
		6 Vdc	Med	1,77	1,88	2,99	3,14	3,74	3,93	6,07	6,37	8,39	8,75
		1 Vdc	Min	0,92	0,97	1,42	1,52	1,81	1,90	2,25	2,36	3,07	3,22
Water flow rate (***)	l/h	10 Vdc	Max	323	386	515	584	712	797	1093	1272	1387	1467
		6 Vdc	Med	249	290	400	476	525	599	793	905	1016	1095
		1 Vdc	Min	129	139	187	232	264	299	307	362	362	388
Water pressure drops (***)	kPa	10 Vdc	Max	11,6	20,0	10,4	12,4	17,1	19,0	8,8	11,0	20,9	22,0
		6 Vdc	Med	7,1	14,5	6,5	8,6	11,1	14,3	5,0	6,0	7,7	8,0
		1 Vdc	Min	2,4	4,2	1,7	2,9	3,9	4,2	1,2	1,9	1,2	1,9
Heating capacity EN 1397 (input water 70°C) (****)	kW	10 Vdc	Max	4,20	4,36	6,56	6,85	8,96	9,31	14,28	14,86	19,35	20,14
		6 Vdc	Med	2,98	3,14	5,1	5,26	6,28	6,56	10,30	10,8	14,35	14,91
		1 Vdc	Min	1,56	1,64	2,44	2,56	3,06	3,19	3,87	3,98	5,4	5,60
Water flow rate (****)	l/h	10 Vdc	Max	359	373	562	586	767	797	1220	1269	1652	1719
		6 Vdc	Med	255	269	433	451	539	563	883	923	1229	1277
		1 Vdc	Min	134	140	209	220	262	273	332	342	461	480
Water pressure drops (****)	kPa	10 Vdc	Max	14,1	18,6	12,2	12,5	19,5	19,0	10,7	11,0	28,6	29,3
		6 Vdc	Med	7,4	12,6	7,5	7,8	11,6	12,7	6,0	6,3	10,9	10,5
		1 Vdc	Min	2,5	4,3	2,1	2,6	3,8	3,6	1,4	1,7	1,9	2,8
Nominal heating capacity EN 1397 additional coil KB4 (65°C) (*****)	kW	10 Vdc	Max	1,95	2,08	2,94	2,80	3,36	3,20	5,64	5,37	6,50	6,17
		6 Vdc	Med	1,66	1,60	2,34	2,22	2,84	2,70	4,67	4,45	5,39	5,14
		1 Vdc	Min	0,87	0,83	1,30	1,23	1,53	1,46	2,17	2,06	2,51	2,40
Water flow rate additional coil KB4 (*****)	l/h	10 Vdc	Max	166	176	250	238	285	272	477	454	547	518
		6 Vdc	Med	142	136	200	190	243	231	399	380	459	437
		1 Vdc	Min	75	71	111	105	131	124	186	176	215	206
Pressure drops additional coil KB4 (*****)	kPa	10 Vdc	Max	5,7	9,7	13,1	13,1	2,9	2,9	9,4	9,5	19,7	17,8
		6 Vdc	Med	4,7	8,1	7,4	7,4	2,0	2,0	6,8	6,9	13,1	11,9
		1 Vdc	Min	1,3	4,0	2,6	2,6	0,7	0,8	2,2	2,2	3,4	3,0
Nominal heating capacity EN1397 additional coil KB4 (70°C) (*****)	kW	10 Vdc	Max	2,21	2,36	3,33	3,17	3,83	3,64	6,38	6,08	7,37	6,98
		6 Vdc	Med	1,92	1,84	2,65	2,52	3,30	3,15	5,30	5,04	6,12	5,83
		1 Vdc	Min	1,01	0,96	1,48	1,41	1,79	1,70	2,50	2,38	2,90	2,76
Water flow rate additional coil KB4 (*****)	l/h	10 Vdc	Max	188	200	284	270	326	310	541	514	622	587
		6 Vdc	Med	164	157	226	215	283	269	453	431	522	496
		1 Vdc	Min	86	82	126	120	153	145	214	204	248	236
Pressure drops additional coil KB4 (*****)	kPa	10 Vdc	Max	7,2	12,2	16,4	16,4	3,7	3,7	11,8	11,9	24,8	22,3
		6 Vdc	Med	6,1	10,5	9,3	9,3	2,6	2,6	8,6	8,6	16,5	14,9
		1 Vdc	Min	1,7	5,2	3,3	3,3	0,9	1,0	2,8	2,8	4,4	3,9
Electric heater	kW	230V-1ph-50Hz	-	0,5	0,5	1,0	1,0	2,0	2,0	3,0	3,0	3,0	3,0
Air flow rate	m³/h	10 Vdc	Max	331	331	523	523	645	645	1235	1235	1503	1458
		6 Vdc	Med	230	230	400	400	450	450	780	780	965	965
		1 Vdc	Min	97	97	167	167	198	198	256	256	300	300
Fans	n°	-	-	1	1	2	2	2	2	2	2	3	3
Sound power	dB(A)	10 Vdc	Max	48	48	50	50	51	51	62	62	66	66
		6 Vdc	Med	40	40	43	43	42	42	50	50	56	56
		1 Vdc	Min	29	29	29	29	29	29	30	30	32	32
Sound pressure (*****)	dB(A)	10 Vdc	Max	39	39	41	41	42	42	53	53	57	57
		6 Vdc	Med	31	31	34	34	33	33	41	41	47	47
		1 Vdc	Min	20	20	20	20	20	20	21	21	23	23
Main coil rows	n°	-	-	3	4	3	4	3	4	3	4	3	4
Main coil water content	l	-	-	0,92	1,23	1,33	1,77	1,74	2,32	3,35	3,14	3,35	3,14
Coil water content KB4	l	-	-	0,31	0,31	0,42	0,42	0,53	0,53	0,69	0,69	0,69	0,69

YARDY-I-EV3					20	24	30	34	45	48	60	74	80	88
Absorbed power	W	10 Vdc	Max	23	25	26	28	39	42	89	95	136	146	
		6 Vdc	Med	13	14	15	16	14	15	28	30	52	56	
		1 Vdc	Min	6	6	6	6	7	8	7	7	9	10	
Absorbed current	A	10 Vdc	Max	0,28	0,30	0,30	0,32	0,31	0,33	0,75	0,80	1,00	1,07	
		6 Vdc	Med	0,16	0,17	0,18	0,19	0,16	0,17	0,27	0,29	0,40	0,43	
		1 Vdc	Min	0,06	0,06	0,06	0,09	0,08	0,09	0,06	0,09	0,08	0,09	
Electrical supply	V-ph-Hz	-	-											230-1-50
Width MXP-MXT-MVP-MVT	mm	-	-	800	800	1000	1000	1200	1200	1500	1500	1500	1500	1500
Height x Depth MXP-MXT- MVP-MVT	mm	-	-											583 x 220
Width IXP-IVP-IVF	mm	-	-	550	550	750	750	950	950	1250	1250	1250	1250	1250
Height x Depth IXP-IVP-IVF	mm	-	-											545 x 212
Height of feet	mm	-	-											100
Weight MXP-MXT-MVP-MVT	kg	-	-	20	20,5	21	22	28	29	35	36	37	38	
Weight IXP-IVP-IVF	kg	-	-	16,5	17	20,5	21,5	25,5	27	34,5	35,5	36,5	37,5	
Standard coil connections / additional coil KB4		-	-											¾ G (F) / ½ G (F)
Condensate drain connection (Ø)	mm	-	-											16

- (*) In the following conditions: room temperature 27°C D.B; 19°C W.B; input water temperature 7°C with Δt 5°C. (*****) In the following conditions: room temperature 20°C; input water temperature 70°C with Δt 10°C.
- (**) In the following conditions: room temperature 20°C; input water temperature 45°C with Δt 5°C. (******) In the following conditions: room temperature 20°C; input water temperature 65°C with Δt 10°C.
- (***) In the following conditions: room temperature 20°C; input water temperature 50°C, water flow rate as in cooling (******) Sound pressure level expressed in dB(A) for an environmental volume of 100 m3 and echo time = 0.5 sec.

N.B. Performance achievable with motor input signal 10/6/1 Vdc at Max / Med / Min speed

YARDY DUCT2			40	48	60	74	80	88
Nominal cooling capacity EN 1397 (total heat) (*)	kW	VI	1,90	2,22	3,47	4,43	4,83	5,69
		V	1,76	2,06	3,31	4,24	4,61	5,53
		IV	1,50	1,69	3,18	4,00	4,38	5,42
		III	1,35	1,57	3,01	3,78	4,17	5,20
		II	1,24	1,44	2,65	3,41	3,91	4,94
		I	1,07	1,25	2,41	3,14	3,86	4,80
Nominal cooling capacity EN 1397 (sensitive heat) (*)	kW	VI	1,54	1,70	2,88	3,62	4,06	4,41
		V	1,37	1,56	2,76	3,40	3,90	4,27
		IV	1,09	1,24	2,50	3,20	3,54	4,19
		III	0,98	1,12	2,35	2,92	3,40	3,96
		II	0,91	1,00	1,98	2,55	3,23	3,63
		I	0,80	0,87	1,79	2,29	3,11	3,52
Water flow rate (*)	l/h	VI	338	393	618	783	855	1006
		V	312	364	589	750	815	973
		IV	264	297	561	702	776	953
		III	239	276	532	665	735	912
		II	218	252	469	601	688	865
		I	189	220	428	553	678	839
Water pressure drops (*)	kPa	VI	6,5	6,9	5,1	5,3	8,8	11,2
		V	5,7	6,0	4,8	4,9	8,0	10,1
		IV	5,0	4,2	4,4	4,4	5,5	9,0
		III	4,3	3,7	4,3	4,2	5,0	8,1
		II	3,0	3,1	4,2	3,9	4,4	7,2
		I	2,3	3,0	3,7	3,3	4,2	6,6
Heating capacity EN 1397 (input water 45°C) (**)	kW	VI	2,10	2,15	4,11	4,18	5,77	6,12
		V	1,90	1,97	3,92	3,98	5,62	5,80
		IV	1,53	1,59	3,69	3,75	5,51	5,74
		III	1,40	1,46	3,49	3,55	5,30	5,45
		II	1,27	1,33	3,21	3,26	4,78	5,10
		I	1,10	1,15	2,94	2,98	4,61	5,06
Water flow rate (***)	l/h	VI	350	357	685	695	966	1022
		V	316	327	653	662	944	973
		IV	256	267	620	629	926	964
		III	235	244	585	594	892	918
		II	214	223	537	545	803	859
		I	185	193	493	499	776	855
Water pressure drops (**)	kPa	VI	6,4	5,5	4,6	4,0	10,7	8,3
		V	5,4	4,7	4,2	3,8	10,2	6,9
		IV	4,2	3,3	3,7	3,4	8,9	6,4
		III	3,9	2,8	3,6	3,3	8,2	6,2
		II	2,6	2,4	3,6	3,1	6,5	5,2
		I	2,0	2,3	3,2	2,6	5,9	5,1
Heating capacity (input water 50°C) (***)	kW	VI	2,44	2,53	4,74	4,98	6,68	7,18
		V	2,21	2,32	4,52	4,75	6,51	6,84
		IV	1,80	1,89	4,29	4,50	6,37	6,76
		III	1,65	1,73	4,05	4,25	6,13	6,44
		II	1,50	1,58	3,70	3,89	5,53	6,04
		I	1,30	1,37	3,39	3,56	5,35	5,99
Water flow rate (***)	l/h	VI	338	393	618	783	855	1002
		V	312	364	589	750	815	972
		IV	264	297	561	702	776	949
		III	239	276	532	665	735	912
		II	218	252	469	601	688	865
		I	189	220	428	553	678	839
Water pressure drops (***)	kPa	VI	6,0	6,5	3,8	5,0	8,6	8,0
		V	5,3	5,7	3,5	4,7	7,8	6,9
		IV	4,5	4,0	3,1	4,2	6,5	6,3
		III	4,0	3,5	3,0	4,0	5,8	6,1
		II	2,7	3,0	2,8	3,7	4,9	5,3
		I	2,1	2,9	2,5	3,1	4,6	4,9
Heating capacity EN 1397 (input water 70°C) (****)	kW	VI	4,18	4,30	8,21	8,50	11,48	12,23
		V	3,78	3,94	7,84	8,10	11,20	11,64
		IV	3,07	3,20	7,44	7,67	10,98	11,52
		III	2,82	2,93	7,04	7,24	10,56	10,98
		II	2,56	2,67	6,48	6,65	9,52	10,32
		I	2,22	2,31	5,95	6,08	9,20	10,26

			40	48	60	74	80	88
Water flow rate (****)	l/h	VI	353	364	695	719	974	1035
		V	320	334	664	686	951	988
		IV	261	272	632	651	933	980
		III	239	248	598	615	899	935
		II	218	227	550	564	809	878
		I	188	196	505	516	783	874
Water pressure drops (****)	kPa	VI	6,5	5,7	4,7	4,3	10,9	8,5
		V	5,5	4,9	4,3	4,0	10,3	7,1
		IV	4,4	3,4	3,8	3,7	9,1	6,6
		III	4,0	2,9	3,7	3,5	8,3	6,4
		II	2,7	2,5	3,7	3,3	6,6	5,4
		I	2,1	2,4	3,4	2,7	6,0	5,3
Nominal heating capacity EN 1397 additional coil KB4 (65°C) (*****)	kW	VI	1,97	1,87	3,78	3,60	4,64	4,42
		V	1,84	1,75	3,76	3,56	4,46	4,24
		IV	1,69	1,61	3,62	3,42	4,36	4,15
		III	1,50	1,43	3,52	3,33	4,26	4,05
		II	1,41	1,34	3,42	3,22	4,16	3,95
		I	1,27	1,21	3,34	3,14	4,04	3,84
Water flow rate additional coil KB4 (*****)	l/h	VI	163	155	314	298	386	365
		V	153	145	313	296	372	352
		IV	142	135	303	286	364	345
		III	126	119	295	278	357	338
		II	118	112	287	269	348	329
		I	107	102	280	263	340	322
Pressure drops additional coil KB4 (*****)	kPa	VI	1,1	1,1	4,5	4,5	6,4	9,1
		V	1,0	1,0	4,2	4,4	6,0	8,8
		IV	0,8	0,8	4,1	4,2	5,9	8,6
		III	0,7	0,7	4,0	3,9	5,8	8,2
		II	0,6	0,6	3,8	3,5	5,4	7,7
		I	0,5	0,6	3,4	3,3	5,1	7,5
Nominal heating capacity EN1397 additional coil KB4 (70°C) (****)	kW	VI	2,29	2,18	4,27	4,07	5,24	4,99
		V	2,14	2,04	4,24	4,04	5,03	4,79
		IV	1,97	1,87	4,09	3,90	4,93	4,70
		III	1,75	1,66	3,99	3,80	4,81	4,58
		II	1,63	1,55	3,88	3,70	4,70	4,47
		I	1,47	1,40	3,80	3,61	4,57	4,35
Water flow rate additional coil KB4 (****)	l/h	VI	191	181	356	338	438	414
		V	179	170	354	336	421	400
		IV	166	157	344	327	413	392
		III	147	139	335	319	404	383
		II	138	131	327	310	395	374
		I	124	118	320	304	385	365
Pressure drops additional coil KB4 (****)	kPa	VI	1,4	1,4	5,6	5,6	8,0	11,4
		V	1,3	1,3	5,3	5,5	7,5	11,1
		IV	1,0	1,0	5,1	5,4	7,4	10,8
		III	0,9	0,9	5,0	5,0	7,3	10,3
		II	0,8	0,8	4,8	4,5	6,7	9,7
		I	0,6	0,8	4,3	4,3	6,4	9,4
Electric heater	kW	230V-1ph-50Hz	2,0	2,0	3,0	3,0	3,0	3,0
Air flow rate	m³/h	VI	275	275	620	620	912	862
		V	250	250	587	587	858	828
		IV	198	198	539	539	820	800
		III	180	180	504	504	772	759
		II	163	163	445	445	715	708
		I	140	140	402	402	685	680
Speed available head pressure	Pa	VI	56	56	66	66	62	62
		V	49	49	59	59	54	54
		IV	33	33	51	51	49	50
		III	19	28	44	44	45	45
		II	16	24	34	34	39	39
		I	9	18	28	28	35	35
Fans	n°		2	2	2	2	3	3
Flow sound power level	dB(A)	VI	50	50	56	56	57	57
		V	48	48	55	55	55	55
		IV	43	43	54	54	54	54
		III	42	42	51	51	53	53
		II	38	38	50	50	51	51
		I	37	37	48	46	50	50

			40	48	60	74	80	88
Radiated and return sound power level	dB(A)	VI	55	55	62	62	64	64
		V	53	53	60	60	62	62
		IV	47	47	58	58	61	61
		III	45	45	56	56	58	58
		II	42	42	53	53	57	57
		I	41	41	51	51	56	56
Flow sound pressure level (******)	dB(A)	VI	41	41	47	47	48	48
		V	39	39	46	46	46	46
		IV	34	34	45	45	45	45
		III	33	33	42	42	44	44
		II	29	29	41	41	42	42
		I	28	28	39	37	41	41
Radiated and return sound pressure level (******)	dB(A)	VI	46	46	53	53	55	55
		V	44	44	51	51	53	53
		IV	38	38	49	49	52	52
		III	36	36	47	47	49	49
		II	33	33	44	44	48	48
		I	32	32	42	42	47	47
Main coil rows	n°		3	4	3	4	3	4
Main coil water content	I		1,74	2,32	3,35	3,14	3,35	3,14
Coil water content KB4	I		0,53	0,53	0,69	0,69	0,69	0,69
Absorbed power	W	VI	68	71	128	135	154	154
		V	60	63	120	126	134	134
		IV	41	43	91	95	127	127
		III	36	38	88	93	109	109
		II	32	34	84	89	105	105
		I	27	28	77	80	91	91
Absorbed current	A	VI	0,30	0,32	0,51	0,54	0,69	0,69
		V	0,27	0,28	0,46	0,48	0,60	0,60
		IV	0,18	0,19	0,36	0,38	0,51	0,51
		III	0,16	0,17	0,35	0,37	0,49	0,49
		II	0,14	0,15	0,33	0,35	0,47	0,47
		I	0,12	0,13	0,33	0,35	0,41	0,41
Electrical supply	V-ph-Hz				230-1-50			
Width	mm		950	950	1250	1250	1250	1250
Height x Depth	mm				545 x 212			
Weight	kg		26	27	35	36	37	38
Standard coil connections					¾ G (F)			
Additional coil connections KB4					½ G (F)			
Condensate drain connection (Ø)	mm				16			

- (*) In the following conditions: room temperature 27°C D.B.; 19°C W.B.; input water temperature 7°C with Δt 5°C.
- (**) In the following conditions: room temperature 20°C; input water temperature 45°C with Δt 5°C
- (***) In the following conditions: room temperature 20°C; input water temperature 50°C, water flow rate as in cooling
- (****) In the following conditions: room temperature 20°C; input water temperature 70°C with Δt 10°C
- (*****) In the following conditions: room temperature 20°C; input water temperature 65°C with Δt 10°C
- (******) Sound pressure level expressed in dB(A) for an environmental volume of 100 m3 and echo time = 0.5 sec.

N.B. Data in bold refer to the Max / Med / Min wired speeds wired in a terminal block and Eurovent certified

YARDY-ID2			Model	40	40	48	48	60	60	74	74	80	80	88	88
		Motor input (1)	8/6,5/2 Vdc	10/7/2 Vdc	8/6,5/2 Vdc	10/7/2 Vdc									
Nominal cooling capacity EN 1397 (total heat) (*)	kW	Max	2,36	3,01	2,58	3,28	3,29	4,12	3,81	4,58	4,65	5,88	5,00	6,26	
		Med	2,01	2,70	2,24	2,95	3,03	3,50	3,50	4,42	3,77	5,32	4,23	5,70	
		Min	1,19	1,19	1,28	1,28	1,58	1,58	1,72	1,72	2,03	2,03	2,29	2,29	
Nominal cooling capacity EN 1397 (sensitive heat) (*)	kW	Max	1,75	2,20	1,83	2,69	2,74	3,33	2,83	3,48	3,98	4,71	3,60	5,10	
		Med	1,52	1,99	1,56	2,32	2,49	3,19	2,59	3,32	3,35	4,08	3,03	4,32	
		Min	0,88	0,88	0,96	0,96	1,17	1,17	1,23	1,23	1,57	1,57	1,75	1,75	
Water flow rate (*)	l/h	Max	416	529	455	575	579	724	670	803	815	1033	875	1099	
		Med	352	474	391	517	530	615	613	772	659	932	738	996	
		Min	206	206	221	221	273	273	297	297	350	350	395	395	
Water pressure drops (*)	kPa	Max	7,7	11,9	8,0	12,0	3,0	4,5	4,4	5,3	8,0	8,7	7,0	8,4	
		Med	5,7	9,7	6,2	10,0	2,6	4,1	4,2	4,9	5,5	8,3	6,4	7,9	
		Min	2,7	2,7	2,3	2,3	1,0	1,0	3,9	3,9	1,2	1,2	5,6	5,6	
Heating capacity EN 1397 (input water 45°C) (***)	kW	Max	2,57	3,29	2,60	3,35	3,84	4,73	3,83	4,77	5,66	7,37	5,74	7,48	
		Med	2,15	2,93	2,17	2,97	3,47	4,53	3,46	4,48	4,65	6,60	4,67	6,71	
		Min	1,16	1,16	1,18	1,18	1,58	1,58	1,60	1,60	2,50	2,50	2,51	2,51	
Water flow rate (***)	l/h	Max	431	554	435	563	645	797	644	801	955	1244	969	1262	
		Med	364	494	367	500	585	765	583	756	786	1118	791	1136	
		Min	197	197	201	201	270	270	275	275	427	427	429	429	
Water pressure drops (**)	kPa	Max	7,5	11,9	7,0	11,0	3,4	5,0	3,9	5,0	8,4	11,2	7,8	10,3	
		Med	5,6	9,1	5,3	8,6	2,9	4,9	3,7	4,2	6,9	9,4	6,9	8,6	
		Min	2,3	2,3	1,8	1,8	1,0	1,0	3,2	3,2	1,6	1,6	6,2	6,2	
Heating capacity (input water 50°C) (****)	kW	Max	3,00	3,86	3,06	3,94	4,46	5,52	4,55	5,63	6,58	8,55	6,71	8,72	
		Med	2,54	3,44	2,59	3,51	4,05	5,23	4,13	5,33	5,39	7,69	5,50	7,84	
		Min	1,39	1,39	1,42	1,42	1,90	1,90	1,94	1,94	2,92	2,92	2,98	2,98	
Water flow rate (****)	l/h	Max	416	529	455	575	579	724	670	803	815	1033	875	1099	
		Med	352	474	391	517	530	615	613	772	659	932	738	996	
		Min	206	206	221	221	273	273	297	297	350	350	395	395	
Water pressure drops (****)	kPa	Max	7,0	10,9	7,6	11,4	2,8	4,2	4,2	5,0	6,3	8,0	6,5	8,0	
		Med	5,3	8,4	5,9	9,1	2,4	3,3	4,0	4,4	5,0	6,8	6,1	6,8	
		Min	2,5	2,5	2,2	2,2	1,0	1,0	3,7	3,7	1,1	1,1	5,3	5,3	
Heating capacity EN 1397 (input water 70°C) (*****)	kW	Max	5,10	6,55	5,18	6,66	7,71	9,44	7,81	9,62	11,29	14,71	11,53	14,93	
		Med	4,31	5,84	4,38	5,92	7,01	9,04	7,07	9,10	9,32	13,20	9,49	13,42	
		Min	2,35	2,35	2,38	2,38	3,24	3,24	3,27	3,27	5,10	5,10	5,13	5,13	
Water flow rate (*****)	l/h	Max	433	558	440	566	656	803	663	818	962	1253	982	1272	
		Med	367	497	374	504	598	770	602	775	795	1127	810	1145	
		Min	201	201	204	204	278	278	280	280	438	438	440	440	
Water pressure drops (*****)	kPa	Max	7,5	12,0	7,2	11,1	3,5	5,1	4,1	5,2	8,5	11,3	8,0	10,4	
		Med	5,7	9,1	5,4	8,7	3,0	5,0	3,9	4,4	7,0	9,6	7,2	8,7	
		Min	2,4	2,4	1,9	1,9	1,0	1,0	3,3	3,3	1,6	1,6	6,4	6,4	
Nominal heating capacity EN 1397 additional coil KB4 (65°C) (*****)	kW	Max	2,28	2,75	2,18	2,63	3,56	4,17	3,39	4,32	4,54	5,70	4,33	5,42	
		Med	2,01	2,51	1,91	2,41	3,30	4,00	3,15	3,70	3,91	5,10	3,71	5,02	
		Min	1,28	1,28	1,22	1,22	1,91	1,91	1,91	1,91	2,42	2,42	2,30	2,30	
Water flow rate additional coil KB4 (*****)	l/h	Max	191	231	182	220	299	350	284	363	381	478	363	454	
		Med	169	211	161	201	279	337	265	311	329	430	313	423	
		Min	109	109	104	104	164	164	163	163	207	207	197	197	
Pressure drops additional coil KB4 (*****)	kPa	Max	1,4	2,0	1,4	2,2	4,1	5,4	6,1	10,5	6,3	9,5	6,3	9,5	
		Med	1,1	1,7	1,1	1,7	3,6	5,0	5,4	9,7	4,8	7,8	4,8	7,8	
		Min	0,5	0,5	0,8	0,8	1,7	1,7	4,9	4,9	2,1	2,1	2,1	2,1	
Nominal heating capacity EN1397 additional coil KB4 (70°C) (*****)	kW	Max	2,66	3,19	2,53	3,03	4,03	4,71	3,83	4,89	5,15	6,46	4,90	6,14	
		Med	2,34	2,92	2,23	2,78	3,74	4,51	3,56	4,18	4,43	5,78	4,21	5,69	
		Min	1,48	1,48	1,41	1,41	2,21	2,21	2,20	2,20	2,79	2,79	2,65	2,65	
Water flow rate additional coil KB4 (*****)	l/h	Max	223	268	212	255	339	396	322	411	433	543	412	516	
		Med	198	246	188	234	316	381	300	353	374	488	355	481	
		Min	126	126	120	120	189	189	188	188	239	239	227	227	
Pressure drops additional coil KB4 (*****)	kPa	Max	1,9	2,6	1,9	2,8	5,1	6,8	7,7	13,1	7,9	11,9	7,9	11,9	
		Med	1,5	2,2	1,5	2,2	4,5	6,3	6,8	12,1	6,0	9,8	6,0	9,8	
		Min	0,6	0,6	1,0	1,0	2,2	2,2	6,3	6,3	2,7	2,7	2,7	2,7	
Electric heater	kW	230V-1ph-50Hz	2,0	2,0	2,0	2,0	3,0	3,0	3,0	3,0	3,0	3,0	3,0	3,0	
Air flow speed	m³/h		Max	350	469	350	469	573	737	573	737	767	1010	738	949
Speed available head pressure	Pa		Med	291	410	291	410	512	691	512	691	606	866	594	831
Fans	n°		Max	70	64	70	64	61	56	61	56	76	65	74	64
Flow sound power level	dB(A)		Med	51	56	51	56	55	57	55	57	57	58	57	58
			Min	48	52	47	52	52	56	52	56	56	57	56	57

YARDY-ID2			Model	40	40	48	48	60	60	74	74	80	80	88	88
				Motor input (1)	8/6,5/2 Vdc	10/7/2 Vdc									
Radiated and return sound power level	dB(A)	Max	55	60	55	60	60	62	60	62	63	64	62	64	
		Med	55	56	55	56	56	60	56	60	60	62	60	62	
		Min	32	32	32	32	32	32	32	32	32	32	32	32	
Flow sound pressure level (*****)	dB(A)	Max	42	47	42	47	46	48	46	48	48	49	49	48	
		Med	39	43	38	43	43	47	43	47	47	48	47	48	
		Min	21	21	21	21	21	21	21	21	21	21	21	21	
Radiated and return sound pressure level (*****)	dB(A)	Max	46	51	46	51	51	53	51	53	54	55	53	55	
		Med	46	47	46	47	47	51	47	51	51	53	51	53	
		Min	23	23	23	23	23	23	23	23	23	23	23	23	
Main coil rows	n°	-	3	3	4	4	3	3	4	4	3	3	4	4	
Main coil water content	l	-	1,74	1,74	2,32	2,32	3,35	3,35	3,14	3,14	3,35	3,35	3,14	3,14	
Coil water content KB4	l	-	0,53	0,53	0,53	0,53	0,69	0,69	0,69	0,69	0,69	0,69	0,69	0,69	
Absorbed power	W	Max	65	69	67	72	85	100	89	105	105	140	105	140	
		Med	38	60	38	63	65	80	68	84	75	100	75	100	
		Min	8	8	8	8	8	8	8	8	13	13	13	13	
Max. absorbed current	A	Max	0,44	0,53	0,46	0,56	0,83	1,04	0,87	1,09	0,75	1	0,75	1,00	
		Med	0,28	0,46	0,29	0,48	0,68	0,83	0,71	0,87	0,34	0,41	0,34	0,81	
		Min	0,06	0,06	0,06	0,06	0,08	0,08	0,08	0,08	0,09	0,09	0,09	0,09	
Electrical supply	V-ph-Hz	-									230-1-50				
Width	mm	-	950	950	950	950	1250	1250	1250	1250	1250	1250	1250	1250	
Height x Depth	mm	-									545 x 212				
Weight	kg	-	25,5	25,5	27	27	34,5	34,5	35,5	35,5	36,5	36,5	37,5	37,5	
Standard coil connections											¾ G (F)				
Additional coil connections KB4											½ G (F)				
Condensate drain connection (Ø)	mm											16			

- (*) In the following conditions: room temperature 27°C D.B.; 19°C W.B.; input water temperature 7°C with Δt 5°C.
- (**) In the following conditions: room temperature 20°C; input water temperature 45°C with Δt 5°C
- (***) In the following conditions: room temperature 20°C; input water temperature 50°C, water flow rate as in cooling
- (****) In the following conditions: room temperature 20°C; input water temperature 70°C with Δt 10°C
- (***** In the following conditions: room temperature 20°C; input water temperature 65°C with Δt 10°C
- (***** Sound pressure level expressed in dB(A) for an environmental volume of 100 m3 and echo time = 0.5 sec.

(1) The performance refers to the following configurations: motor input signal 2 / 6.5 / 8 Vdc at min / med / max motor input signal speed 2/7/10 Vdc at min / med / max speed.

N.B. The data in bold refer to the 10/7/2 Vdc motor input signal and Eurovent certificates

4. Perfomance

4.1 Available head pressure and capacity correction factors

Yardy-EV3 versions IVP-IVF-IXP

Yardy-EV3 15

ΔP_u	Spd max (2)		Spd med (4)		Spd min (6)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	209	1,00	163	0,85	100	0,61
10	155	0,78	93	0,54	-	-
20	108	0,58	46	0,31	-	-
30	62	0,37	-	-	-	-

Yardy-EV3 20

ΔP_u	Spd max (2)		Spd med (4)		Spd min (6)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	288	1,00	207	0,77	155	0,63
10	228	0,82	139	0,56	83	0,38
20	188	0,70	90	0,39	41	0,21
30	153	0,59	52	0,24	-	-
40	118	0,48	-	-	-	-

Yardy-EV3 24

ΔP_u	Spd max (1)		Spd med (3)		Spd min (5)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	339	1,00	238	0,84	177	0,66
10	286	0,86	187	0,68	110	0,41
20	247	0,75	142	0,51	64	0,24
30	211	0,66	103	0,39	-	-
40	175	0,56	-	-	-	-

Yardy-EV3 25

ΔP_u	Spd max (1)		Spd med (3)		Spd min (5)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	484	1,00	339	0,81	252	0,65
10	352	0,76	253	0,63	144	0,41
20	315	0,69	175	0,47	52	0,25
30	275	0,62	118	0,35	-	-
40	232	0,54	75	0,24	-	-
50	178	0,50	-	-	-	-

Yardy-EV3 30

ΔP_u	Spd max (2)		Spd med (3)		Spd min (5)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	483	1,00	383	0,87	281	0,63
10	396	0,84	291	0,69	170	0,42
20	331	0,72	221	0,55	98	0,27
30	270	0,61	157	0,42	-	-
40	209	0,49	97	0,28	-	-
50	136	0,35	-	-	-	-

Yardy-EV3 34

ΔP_u	Spd max (2)		Spd med (3)		Spd min (5)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	547	1,00	434	0,85	321	0,68
10	491	0,91	350	0,71	242	0,54
20	429	0,81	283	0,59	153	0,37
30	362	0,70	222	0,49	-	-
40	288	0,57	160	0,37	-	-
50	203	0,43	-	-	-	-

Yardy-EV3 40

ΔP_u	Spd max (1)		Spd med (3)		Spd min (5)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	587	1,00	419	0,78	365	0,61
10	488	0,85	318	0,62	216	0,40
20	415	0,75	233	0,49	115	0,25
30	349	0,65	157	0,36	-	-
40	283	0,55	-	-	-	-
50	211	0,44	-	-	-	-

Yardy-EV3 45-48

ΔP_u	Spd max (1)		Spd med (3)		Spd min (4)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	681	1,00	474	0,77	338	0,58
10	606	0,90	360	0,61	215	0,39
20	518	0,79	284	0,49	124	0,25
30	447	0,69	214	0,39	-	-
40	383	0,61	136	0,27	-	-
50	318	0,51	-	-	-	-
60	234	0,39	-	-	-	-

Yardy-EV3 55-58

ΔP_u	Spd max (1)		Spd med (3)		Spd min (4)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	1077	1,00	802	0,82	537	0,62
10	1019	0,95	719	0,74	393	0,48
20	930	0,88	628	0,66	316	0,40
30	829	0,80	544	0,58	240	0,33
40	738	0,72	464	0,51	149	0,23
50	655	0,65	381	0,43	-	-
60	568	0,57	282	0,34	-	-
70	450	0,47	-	-	-	-

Yardy-EV3 60

ΔP_u	Spd max (1)		Spd med (3)		Spd min (5)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	1235	1,00	948	0,83	672	0,64
10	1172	0,96	872	0,77	559	0,55
20	1089	0,89	788	0,70	466	0,47
30	995	0,83	704	0,64	382	0,41
40	893	0,75	622	0,57	302	0,34
50	789	0,67	539	0,51	223	0,27
60	684	0,59	453	0,44	142	0,18
70	576	0,51	371	0,39	-	-
80	462	0,43	243	0,27	-	-

Yardy-EV3 80

ΔP_u	Spd max (1)		Spd med (4)		Spd min (6)	
	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%
0	1480	1,00	1171	0,86	994	0,80
10	1408	0,96	1102	0,82	927	0,75
20	1328	0,91	1022	0,76	835	0,68
30	1243	0,86	935	0,71	745	0,62
40	1150	0,80	845	0,65	663	0,56
50	1049	0,74	752	0,58	581	0,50
60	938	0,67	653	0,52	492	0,43
70	816	0,59	544	0,44	386	0,36
80	679	0,48	410	0,34	258	0,26

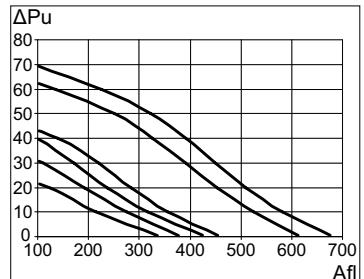
Spd Fan speed

ΔPu Available head pressure

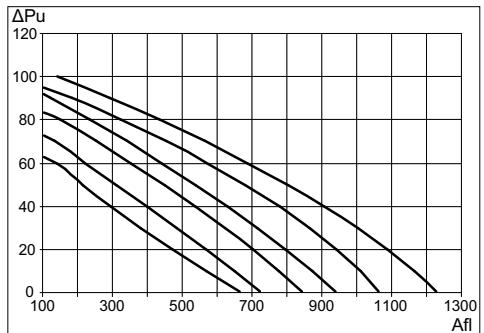
R Capacity correction factor with reference to the nominal cooling capacity (total heat) at maximum speed

Versions Yardy DUCT2**Yardy DUCT2 40-48**

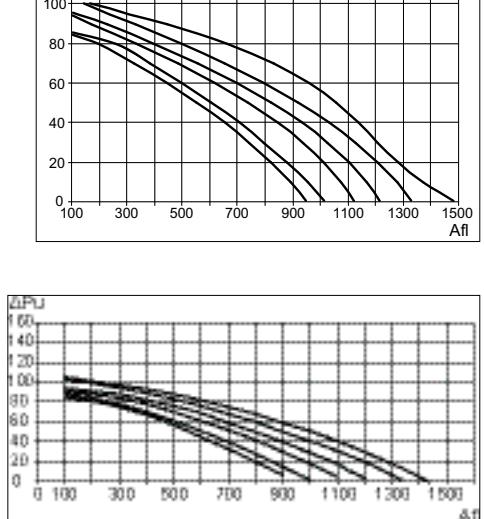
ΔPu	Spd VI		Spd V		Spd IV		Spd III		Spd II		Spd I	
	Afl	R	Afl	R	Afl	R	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%	m³/h	%	m³/h	%	m³/h	%
0	681	2,46	609	2,24	459	1,80	430	1,66	381	1,48	340	1,32
10	603	2,21	530	1,98	358	1,45	319	1,28	275	1,12	215	0,89
20	517	1,93	457	1,74	285	1,19	237	0,99	192	0,82	124	0,56
30	446	1,70	388	1,51	217	0,94	170	0,75	109	0,51	-	-
40	383	1,49	318	1,27	140	0,66	101	0,49	-	-	-	-
50	318	1,26	241	1,00	-	-	-	-	-	-	-	-
60	234	0,97	144	0,64	-	-	-	-	-	-	-	-

**Yardy DUCT2 60-74**

ΔPu	Spd VI		Spd V		Spd IV		Spd III		Spd II		Spd I	
	Afl	R	Afl	R	Afl	R	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%	m³/h	%	m³/h	%	m³/h	%
0	1235	2,03	1077	1,80	948	1,62	856	1,47	735	1,28	670	1,18
10	1172	1,94	1003	1,69	909	1,55	767	1,34	637	1,14	559	1,01
20	1089	1,81	926	1,57	815	1,41	685	1,21	553	1,00	466	0,88
30	995	1,67	846	1,45	721	1,27	608	1,09	475	0,89	382	0,75
40	893	1,52	763	1,32	632	1,13	532	0,98	398	0,78	302	0,62
50	789	1,36	675	1,19	546	1,00	454	0,86	320	0,65	223	0,48
60	684	1,20	580	1,05	457	0,87	371	0,74	235	0,50	-	-
70	576	1,04	475	0,89	359	0,72	277	0,58	-	-	-	-
80	462	0,87	352	0,70	-	-	-	-	-	-	-	-

**Yardy DUCT2 80**

ΔPu	Spd VI		Spd V		Spd IV		Spd III		Spd II		Spd I	
	Afl	R	Afl	R	Afl	R	Afl	R	Afl	R	Afl	R
Pa	m³/h	%	m³/h	%	m³/h	%	m³/h	%	m³/h	%	m³/h	%
0	1480	1,71	1348	1,58	1229	1,44	1137	1,35	1020	1,22	965	1,19
10	1408	1,64	1273	1,50	1159	1,37	1065	1,27	950	1,15	882	1,10
20	1328	1,55	1188	1,41	1083	1,29	986	1,19	873	1,07	802	1,01
30	1243	1,46	1099	1,32	1001	1,20	904	1,10	791	0,98	722	0,92
40	1150	1,37	1005	1,22	912	1,10	817	1,00	703	0,88	640	0,83
50	1049	1,26	904	1,11	814	1,00	724	0,90	608	0,78	555	0,74
60	938	1,14	795	0,99	704	0,88	622	0,79	504	0,67	463	0,63
70	816	1,01	673	0,86	578	0,74	508	0,67	389	0,54	357	0,52
80	679	0,86	535	0,71	427	0,58	370	0,52	260	0,40	219	0,35
90	516	0,68	364	0,52	235	0,36	174	0,29	114	0,20	-	-

**Spd** Fan speed**ΔPu** Available head pressure**Afl** Air flow rate**R** Capacity correction factor with reference to the nominal cooling capacity (total heat)**ΔPu** Available head pressure (Pa)**Afl** Air flow rate (m³/h)

Yardy-I versions IVP - IVF - IXP

Yardy-I 20-24

ΔPu	Spd max 10 Vdc		Spd med 6 Vdc	
	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%
0	331	1,00	230	0,77
10	266	0,83	150	0,54
20	211	0,69	64	0,27
30	160	0,55	-	-
40	110	0,40	-	-
50	58	0,23	-	-

Yardy-I 30-34

ΔPu	Spd max 10 Vdc		Spd med 6 Vdc	
	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%
0	523	1,00	400	0,81
10	432	0,85	265	0,57
20	344	0,70	143	0,34
30	256	0,54	-	-
40	167	0,38	-	-
50	71	0,18	-	-

Yardy-I 45-48

ΔPu	Spd max 10 Vdc		Spd med 6 Vdc	
	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%
0	645	1,00	450	0,75
10	542	0,86	315	0,55
20	438	0,71	182	0,34
30	334	0,55	-	-
40	234	0,41	-	-
50	141	0,28	-	-
60	55	0,13	-	-

Yardy-I 60-74

ΔPu	Spd max 10 Vdc		Spd med 6 Vdc	
	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%
0	1235	1,00	780	0,73
10	1064	0,88	315	0,35
20	944	0,79	179	0,22
30	811	0,69	63	0,09
40	665	0,58	-	-
50	508	0,46	-	-
60	347	0,34	-	-
70	188	0,21	-	-

Yardy-I 80

ΔPu	Spd max 10 Vdc		Spd med 6 Vdc	
	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%
0	1503	1,00	965	0,73
10	1345	0,91	826	0,64
20	1277	0,87	681	0,54
30	1211	0,83	510	0,42
40	1147	0,79	292	0,27
50	1082	0,75	-	-
60	1018	0,71	-	-
70	954	0,67	-	-
80	889	0,63	-	-

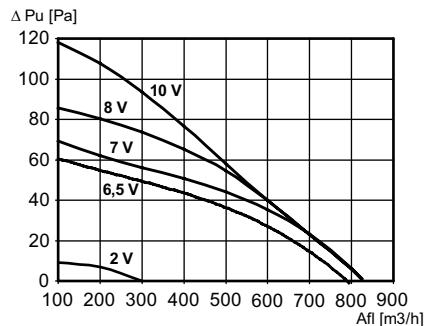
Yardy-I 88

ΔPu	Spd max 10 Vdc		Spd med 6 Vdc	
	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%
0	1458	1,00	965	0,75
10	1381	0,95	826	0,65
20	1298	0,90	681	0,55
30	1209	0,84	510	0,43
40	1113	0,78	292	0,28
50	1006	0,71	-	-
60	888	0,64	-	-
70	754	0,55	-	-
80	597	0,45	-	-

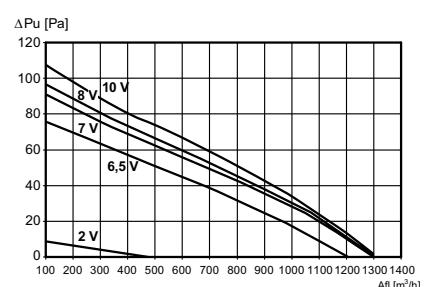
Spd Fan speed**ΔPu** Available head pressure**Afl** Air flow rate**R** Capacity correction factor with reference to the nominal cooling capacity (total heat) at maximum speed

Versioni YardyID2**YardyID2 40 - 48**

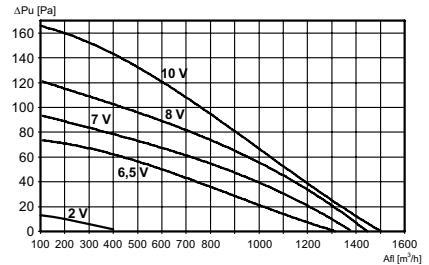
ΔPu	Spd 10 Vdc		Spd 7 Vdc		Spd 8 Vdc		Spd 6,5 Vdc	
	Afl	R	Afl	R	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%	m ³ /h	%	m ³ /h	%
0	838	1,85	840	1,88	833	2,51	790	2,42
10	792	1,76	789	1,78	785	2,38	727	2,25
20	743	1,66	729	1,66	734	2,24	653	2,05
30	690	1,56	655	1,51	676	2,09	562	1,79
40	631	1,44	557	1,30	613	1,91	446	1,45
50	566	1,31	414	1,00	539	1,70	292	1,00
60	497	1,16	233	0,60	453	1,46	111	0,43
70	423	1,00	-	-	347	1,15	-	-
80	347	0,84	-	-	207	0,73	-	-
90	272	0,68	-	-	-	-	-	-
100	201	0,53	-	-	-	-	-	-

**YardyID2 60 - 74**

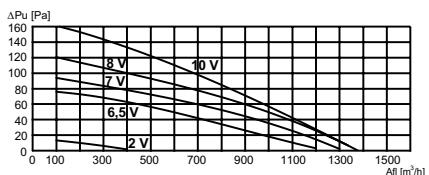
ΔPu	Spd 10 Vdc		Spd 7 Vdc		Spd 8 Vdc		Spd 6,5 Vdc	
	Afl	R	Afl	R	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%	m ³ /h	%	m ³ /h	%
0	1305	1,97	1266	1,72	1302	2,25	1165	2,06
10	1230	1,87	1179	1,61	1217	2,12	1064	1,90
20	1140	1,75	1075	1,49	1116	1,96	944	1,70
30	1042	1,61	958	1,34	1003	1,79	811	1,49
40	933	1,46	828	1,18	877	1,59	665	1,25
50	814	1,30	684	1,00	739	1,36	508	1,00
60	686	1,12	533	0,81	593	1,13	347	0,74
70	554	0,93	383	0,62	446	0,89	188	0,46
80	422	0,75	241	0,43	306	0,67	-	-
90	297	0,57	113	0,23	177	0,43	-	-
100	181	0,38	-	-	-	-	-	-

**YardyID2 80**

ΔPu	Spd 10 Vdc		Spd 7 Vdc		Spd 8 Vdc		Spd 6,5 Vdc	
	Afl	R	Afl	R	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%	m ³ /h	%	m ³ /h	%
0	1504	1,58	1381	1,51	1447	2,17	1384	2,07
10	1420	1,50	1298	1,43	1380	2,08	1197	1,82
20	1341	1,43	1207	1,34	1309	1,99	1040	1,60
30	1265	1,36	1106	1,24	1231	1,88	896	1,40
40	1191	1,29	993	1,13	1148	1,77	754	1,21
50	1119	1,22	866	1,00	1056	1,64	607	1,00
60	1048	1,15	721	0,85	956	1,50	443	0,77
70	977	1,08	555	0,68	846	1,35	228	0,58
80	906	1,01	371	0,49	723	1,17	-	-
90	835	0,94	175	0,27	588	0,98	-	-
100	761	0,87	-	-	440	0,77	-	-

**YardyID2 88**

ΔPu	Spd 10 Vdc		Spd 7 Vdc		Spd 8 Vdc		Spd 6,5 Vdc	
	Afl	R	Afl	R	Afl	R	Afl	R
Pa	m ³ /h	%	m ³ /h	%	m ³ /h	%	m ³ /h	%
0	1380	1,55	1317	1,51	1379	2,08	1243	1,92
10	1315	1,48	1238	1,43	1313	1,99	1105	1,73
20	1250	1,42	1152	1,34	1243	1,90	976	1,55
30	1184	1,35	1057	1,24	1167	1,79	851	1,37
40	1117	1,28	951	1,13	1086	1,68	725	1,19
50	1049	1,21	832	1,00	996	1,55	593	1,00
60	979	1,13	696	0,86	898	1,41	447	0,80
70	909	1,06	541	0,69	790	1,26	267	0,52
80	836	0,99	366	0,51	671	1,10	-	-
90	761	0,91	177	0,28	541	0,91	-	-
100	684	0,83	-	-	401	0,72	-	-

**Spd** Fan speed**ΔPu** Available head pressure (Pa)**Afl** Air flow rate**R** Capacity correction factor with reference to the nominal cooling capacity (total heat)**ΔPu** Available head pressure (Pa)**Afl** Air flow rate (m³/h)

4.2 Plenum and fittings pressure drops

Yardy EV3 IVP - IVF - IXP

Spd	ΔPw	KGF accessory (inlet grille with filter)										KG accessory (outlet grille)											
		Model										Model											
		15	20	24	25	30-34	40	45-48	55	65	80			15	20	24	25	30-34	40	45-48	55	65	80
min	Pa	2,6	3,9	5,1	5,1	8,7	5,8	7,1	11,4	15,0	25,8	1,9	2,9	3,7	3,7	6,3	3,9	4,7	8,4	11,0	19,0		
med	Pa	7,0	7,0	9,3	9,2	15,1	8,5	8,5	16,8	23,5	35,8	5,1	5,1	6,7	6,7	11,0	5,7	5,7	12,4	17,3	26,4		
max	Pa	11,6	13,6	18,8	18,7	23,9	17,4	17,6	30,3	39,8	57,2	8,4	9,9	13,7	13,7	17,5	11,7	11,8	22,3	29,4	42,2		

ΔPw Pressure drops

Spd Fan speed

Spd	ΔPw	Accessory KR9A (90° intake fitting)										Accessory KR9m (90° flow fitting)											
		Model										Model											
		15	20	24	25	30-34	40	45-48	55	65	80			15	20	24	25	30-34	40	45-48	55	65	80
min	Pa	0,2	0,3	0,4	0,4	0,6	0,5	0,7	0,9	1,1	2,0	0,2	0,3	0,3	0,4	0,6	0,5	0,6	0,8	1,1	1,9		
med	Pa	0,5	0,5	0,6	0,7	1,1	0,8	0,8	1,3	1,8	2,7	0,4	0,5	0,6	0,6	1,0	0,8	0,8	1,2	1,7	2,6		
max	Pa	0,8	0,9	1,3	1,4	1,7	1,6	1,6	2,3	3,0	4,4	0,7	0,9	1,2	1,3	1,7	1,5	1,6	2,2	2,9	4,2		

ΔPw Pressure drops

Spd Fan speed

For accessories KPM/KPAF, KRTM/KRDM the pressure drops are negligible.

YardyDUCT2

Spd	ΔPw	Accessory KFAC (frame with G2 filter)												Model								
		Model						Model						40-48	60-74	80-88						
		40-48		60-74		80-88																
I	Pa	0,2						1,1												3,2		
II	Pa	0,3						1,3												3,5		
III	Pa	0,3						1,7												4,0		
IV	Pa	0,4						2,0												4,6		
V	Pa	0,6						2,3												5,0		
VI	Pa	0,8						2,6												5,7		

ΔPw Pressure drops (additional to the nominal conditions)

Spd Fan speed

The increase in head pressure with no G1 filter is negligible

Spd	ΔPw	KGF accessory (inlet grille with filter)						KG accessory (outlet grille)						Model								
		Model			Model			Model			Model			Model			Model					
		40-48		60-74		80-88					40-48		60-74		80-88							
I	Pa	0,8		4,7		13,6		0,6		3,1		9,0										
II	Pa	1,1		5,8		14,8		0,8		3,8		9,8										
III	Pa	1,3		7,4		17,3		1,0		4,9		11,4										
IV	Pa	1,6		8,4		19,5		1,2		5,6		12,9										
V	Pa	2,5		10,0		21,4		1,9		6,6		14,1										
VI	Pa	3,0		11,2		24,1		2,3		7,4		15,9										

ΔPw Pressure drops (additional to the nominal conditions)

Spd Fan speed

The pressure drops are negligible for the KR9A/KR9M accessories

Yardy-I IVP - IVF - IXP

Spd	ΔPu	KFAC accessory (frame with G2 filter)				
		Model				
		20-24	30-34	45-48	60-74	80-88
min (1)	Pa	0,2	0,5	0,4	0,4	0,6
med (6)	Pa	1,2	2,1	1,7	2,5	3,2
max (10)	Pa	2,0	2,9	2,8	3,8	3,8

ΔPu Pressure drops

Spd Fan speed

The increase in head pressure with no G1 filter is negligible

Spd	ΔPu	KGF accessory (inlet grille with filter)					KG accessory (outlet grille)					
		Model					Model					
		20-24	30-34	45-48	60-74	80-88		20-24	30-34	45-48	60-74	80-88
min (1)	Pa	1,7	4,0	3,7	3,6	4,2	1,3	2,6	2,5	2,6	2,6	2,6
med (6)	Pa	8,9	12,9	10,4	16,1	23,7	6,5	8,2	6,1	10,8	17,2	17,2
max (10)	Pa	18,1	20,7	19,1	39,0	59,8	13,2	14,7	13,4	29,3	43,6	43,6

ΔPu Pressure drops

Spd Fan speed

Yardy-ID2

Spd	ΔPu	KFAC accessory (frame with G2 filter)		
		Model		
		40-48	60-74	80-88
min (2)	Pa	0,2	0,3	0,5
med (7)	Pa	1,5	2,1	2,8
max (10)	Pa	1,8	2,3	3,3

ΔPu Pressure drops (additional to the nominal conditions)

Spd Fan speed

The increase in head pressure with no G1 filter is negligible

Spd	ΔPu	KGF accessory (inlet grille with filter)			KG accessory (outlet grille)			
		Model			Model			
		40-48	60-74	80-88		40-48	60-74	80-88
min (2)	Pa	2,9	3,1	4,0	2,7	2,6	2,6	2,6
med (7)	Pa	9,0	13,0	19,3	5,1	8,3	13,6	13,6
max (10)	Pa	11,1	14,5	25,9	6,7	9,5	19,0	19,0

ΔPu Pressure drops (additional to the nominal conditions)

Spd Fan speed

The pressure drops are negligible for the KR9A/KR9M accessories

4.3 Sound power and pressure

Yardy-EV3		Sound power level in dB for octave bands								Overall sound pressure level	Sound pressure level (*)
	Speed	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dB(A)	dB(A)	
15	Minimum 6	25,3	32,6	27,3	20,7	19,8	14,7	14,2	29	20	
	Medium 4	34,1	39,6	36,8	30,7	25,1	18,2	16,4	37	28	
	Maximum 2	38,0	44,5	41,8	36,9	31,8	24,2	14,8	43	34	
20	Minimum 6	29,8	34,3	30,4	23,1	14,6	6,0	5,6	30	21	
	Medium 4	32,5	38,4	35,3	26,9	21,5	14,5	6,4	35	26	
	Maximum 2	39,2	45,5	43,9	36,9	32,8	26,0	17,2	44	35	
24	Minimum 5	29,8	35,5	31,3	22,7	16,9	11,1	5,1	32	23	
	Medium 3	35,8	41,9	39,5	31,8	26,9	20,2	24,7	40	31	
	Maximum 1	42,9	48,6	47,9	41,3	37,9	32,0	23,8	48	39	
25	Minimum 5	25,8	33,1	28,4	21,8	20,6	15,9	16,1	30	21	
	Medium 3	34,1	39,9	37,6	31,5	25,8	20,7	18,7	38	29	
	Maximum 1	43,1	48,6	46,9	43,1	37,5	29,7	21,8	48	39	
30	Minimum 6	33,0	38,4	35,3	29,0	21,1	10,7	6,0	35	26	
	Medium 4	36,3	41,3	39,3	34,0	27,1	17,2	8,0	40	31	
	Maximum 2	41,2	45,9	45,2	40,9	35,4	27,1	16,5	46	37	
34	Minimum 5	33,0	38,4	35,3	29,0	21,1	10,7	6,0	36	27	
	Medium 3	38,6	43,7	42,4	37,7	31,5	22,3	11,9	43	34	
	Maximum 1	44,8	49,1	48,8	44,9	40,2	32,9	23,1	50	41	
40	Minimum 6	32,2	37,7	34,4	27,5	24,6	16,0	13,5	35	26	
	Medium 4	34,7	42,3	40,2	33,9	28,6	20,4	15,0	40	31	
	Maximum 2	44,2	48,4	47,8	42,6	38,4	31,3	22,7	48	39	
45-48	Minimum 6	33,0	37,9	33,8	27,2	23,8	20,5	18,9	35	26	
	Medium 3	39,7	44,7	42,2	37,0	32,5	25,7	21,6	43	34	
	Maximum 1	47,6	51,6	50,7	46,2	42,9	36,3	28,5	52	43	
55-58	Minimum 5	38,3	43,4	40,3	33,6	29,9	22,5	23,0	41	32	
	Medium 3	51,0	53,7	52,5	47,4	45,9	38,2	29,2	54	45	
	Maximum 1	54,0	57,5	57,2	53,1	52,0	44,3	34,8	58	49	
60	Minimum 6	45,1	48,1	46,9	41,3	37,6	31,2	24,7	48	39	
	Medium 3	52,7	55,2	54,4	49,5	48,1	40,8	31,7	56	47	
	Maximum 1	59,3	61,2	60,0	56,4	55,5	49,6	41,7	62	53	
74	Minimum 6	45,1	48,1	46,9	41,3	37,6	31,2	24,7	48	39	
	Medium 4	51,1	53,6	52,7	47,8	45,7	38,3	29,4	54	45	
	Maximum 1	59,3	61,2	60,0	56,4	55,5	49,6	41,7	62	53	
80	Minimum 6	54,0	56,5	56,2	51,9	47,8	41,1	32,6	57	48	
	Medium 4	57,2	59,8	59,4	55,8	52,2	46,5	38,7	61	52	
	Maximum 1	61,8	64,8	63,6	60,8	57,8	53,1	46,5	66	57	
88	Minimum 6	54,0	56,5	56,2	51,9	47,8	41,1	32,6	57	48	
	Medium 3	58,2	61,1	60,6	57,3	54,0	48,7	41,4	62	53	
	Maximum 1	61,8	64,8	63,6	60,8	57,8	53,1	46,5	66	57	

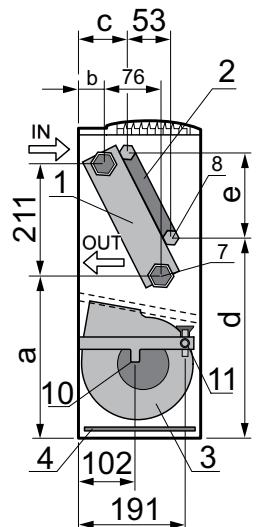
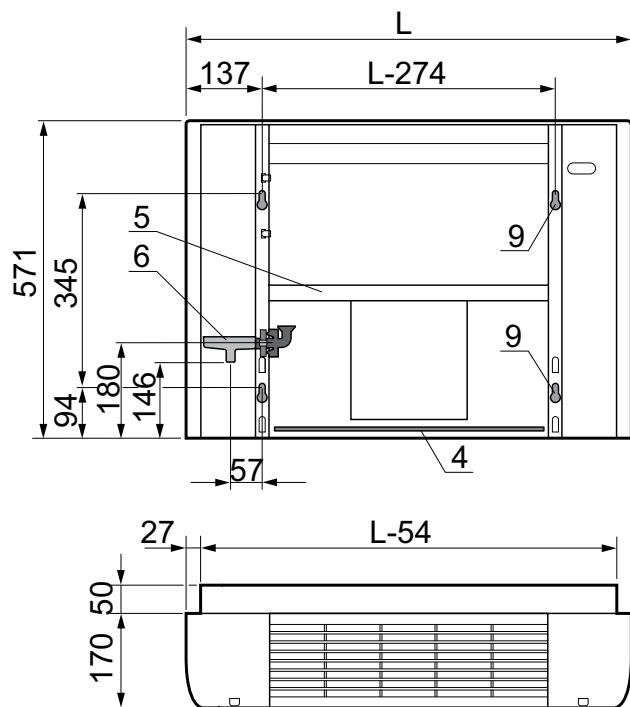
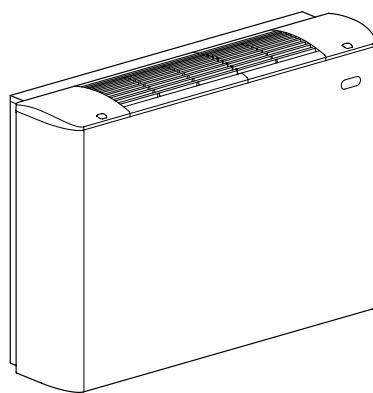
Yardy-I EV3		Sound power level in dB for octave bands								Overall sound pressure level	Sound pressure level (*)
	Speed	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dB(A)	dB(A)	
20-24	Minimum 2	25,3	32,6	27,3	20,7	19,8	14,7	14,2	29	20	
	Medium 1	38,1	43,5	39,4	33,3	27,3	19,1	20,3	40	31	
	Maximum 1	45,1	50,0	46,3	42,7	38,0	30,8	24,0	48	39	
30-34	Minimum 2	25,2	32,8	27,2	20,6	19,9	14,8	14,4	29	20	
	Medium 1	39,9	44,5	41,9	38,4	29,8	20,1	19,8	43	34	
	Maximum 1	46,3	49,9	48,1	46,1	39,7	31,8	23,7	50	41	
45-48	Minimum 2	25,4	32,7	27,3	20,8	19,9	14,7	14,3	29	20	
	Medium 1	41,2	44,5	41,2	36,1	29,5	20,2	19,1	42	33	
	Maximum 1	48,6	52,0	49,9	46,4	41,3	34,1	25,8	51	42	
60-74	Minimum 2	25,8	33,1	28,4	21,8	20,6	15,9	16,1	30	21	
	Medium 1	48,1	51,0	48,9	45,4	40,0	31,1	22,4	50	41	
	Maximum 1	59,1	61,4	58,6	56,7	54,4	47,9	40,1	62	53	
80-88	Minimum 2	27,7	31,7	26,7	29,0	19,4	18,0	19,8	32	23	
	Medium 1	54,0	56,5	54,5	51,8	46,2	38,8	30,3	56	47	
	Maximum 1	64,0	66,2	63,3	61,1	57,8	52,6	46,9	66	57	

* Sound pressure level in dB(A) referring to a 1 m distance from the point of air outlet (with directionality factor Q=2).

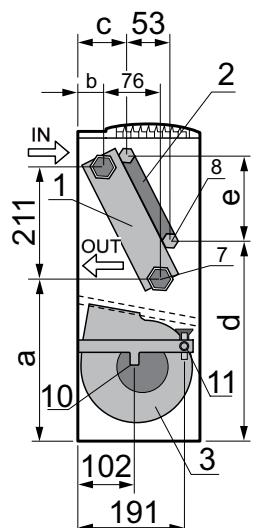
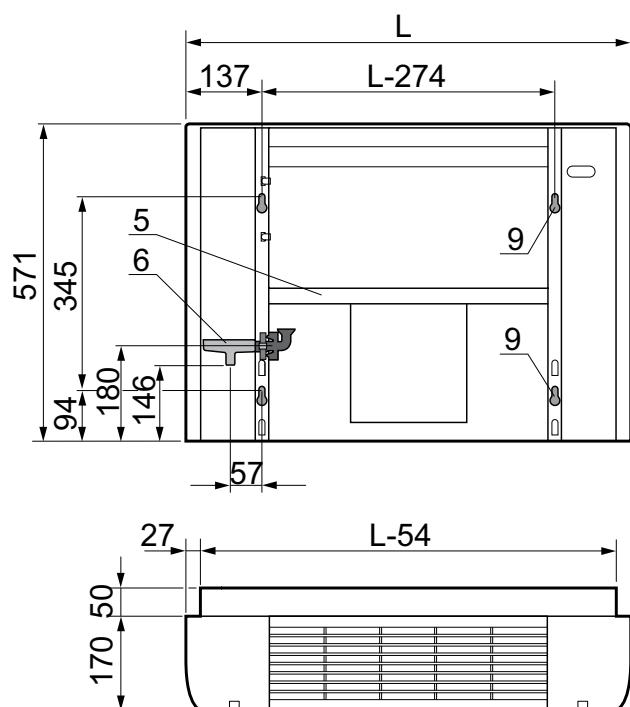
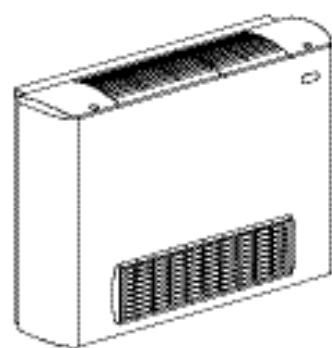
5. Dimensions and clearances

5.1 Vertical installation with cabinet

Yardy EV3 - Yardy-I EV3 version MVP - MXP



Yardy EV3 - Yardy-I EV3 version MVT-MXT



Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	700	800	1000	1200	1500

- 1** Standard coil
- 2** Additional coil (accessory)
- 3** Fan
- 4** Filter
- 5** Main condensation drain pan
- 6** Auxiliary condensation drain pan (accessory)
- 7** Main battery hydraulic connections
- 8** Additional battery hydraulic connections
- 9** Fixing slots
- 10** Additional condensate drain pan
- 11** Main condensate drain pan

Yardy		a	b	c	d	e
10-20-25-30-40	mm	280	51	105	354	148
45-55-58-60-80	mm	280	51	105	354	148
24-34	mm	290	59	111	347	148
48-74-88	mm	290	59	111	347	148

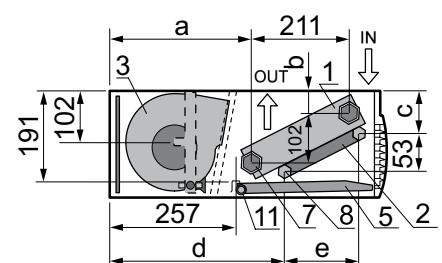
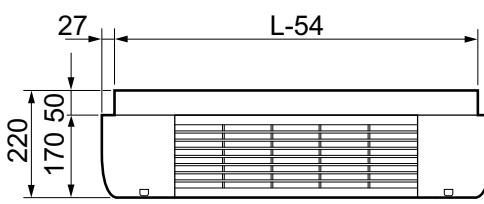
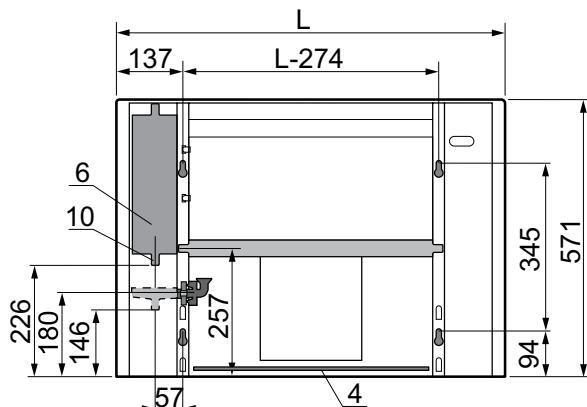
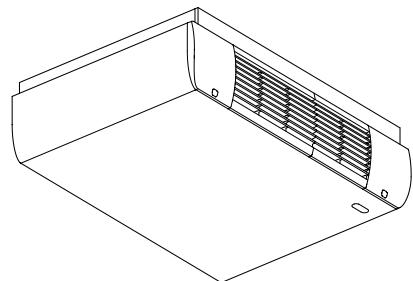
Connections

3/4" main female gas coil
1/2" additional female gas coil

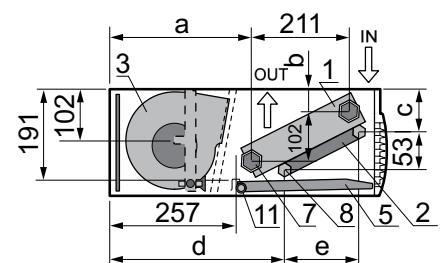
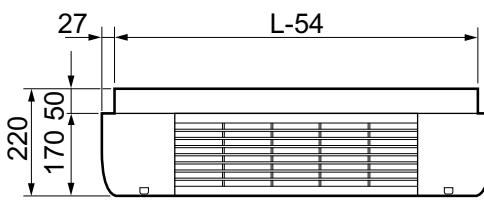
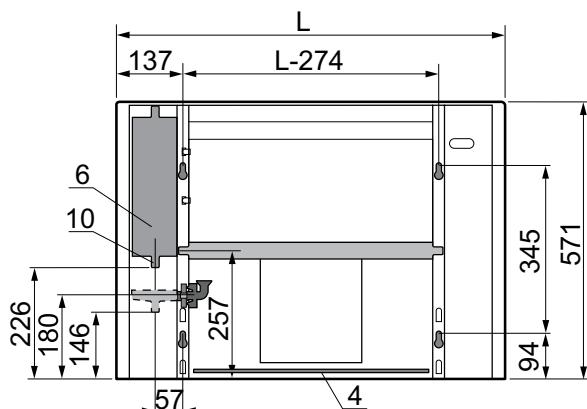
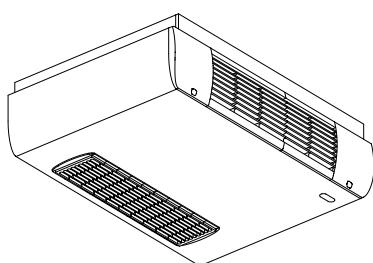
Condensate drainage external diameter 16mm

5.2 Horizontal installation with cabinet

Yardy EV3 - Yardy-I EV3 version MXP



Yardy EV3 - Yardy-I EV3 version MXT



Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	700	800	1000	1200	1500

- 1** Standard coil
- 2** Additional coil (accessory)
- 3** Fan
- 4** Filter
- 5** Main condensation drain pan
- 6** Auxiliary condensation drain pan (accessory)
- 7** Main battery hydraulic connections
- 8** Additional battery hydraulic connections
- 9** Fixing slots
- 10** Additional condensate drain pan
- 11** Main condensate drain pan

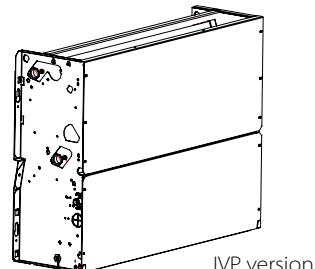
Connections

3/4" main female gas coil
1/2" additional female gas coil

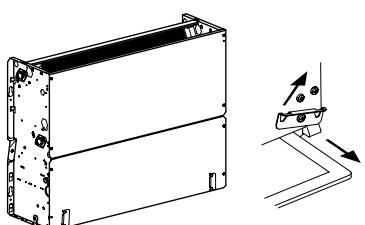
Condensate drainage external diameter 16mm

5.3 Vertical recessed or ductable installation

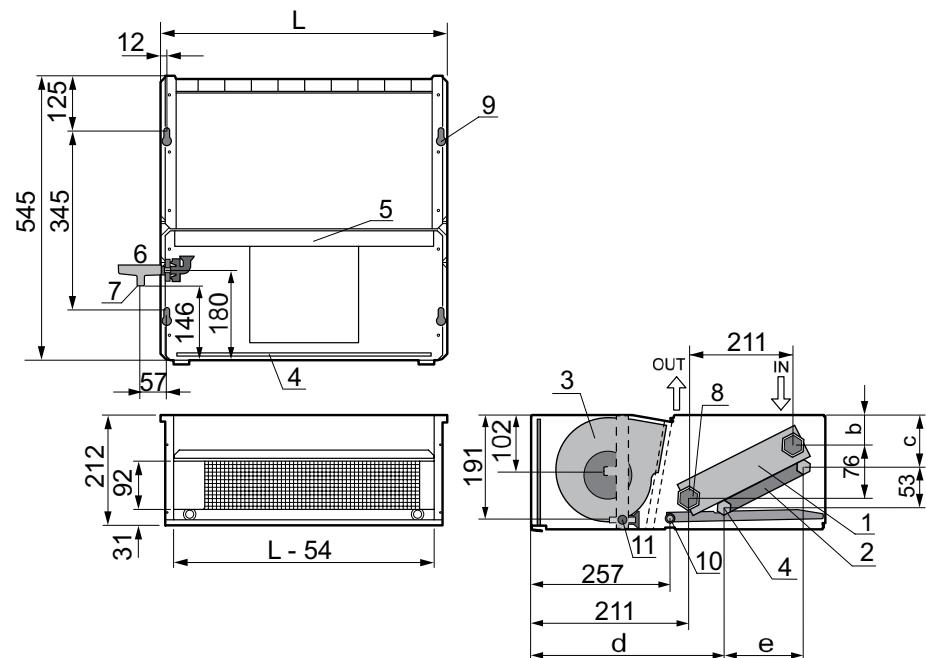
Yardy EV3 - Yardy-I EV3 version IVP-IXP YardyDUCT2, Yardy-ID2 version CXP



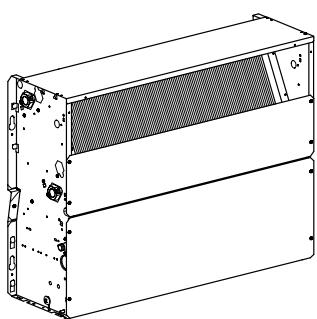
IVP version



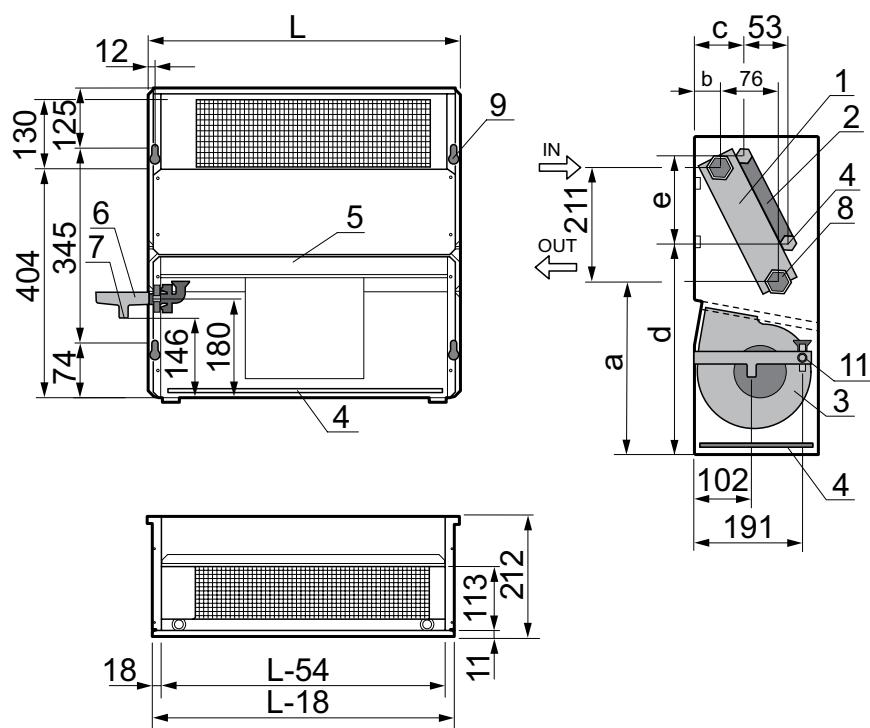
IXP-CXP version



Yardy EV3 - Yardy-I EV3 version IVF



IVF version



Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
L	mm	450	550	750	950	1250

YardyDUCT2		-	-	-	40-48	58-60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	-	-	-	950	1250

- 1** Standard coil
- 2** Additional coil (accessory)
- 3** Fan
- 4** Filter
- 5** Main condensation drain pan
- 6** Auxiliary condensation drain pan (accessory)
- 7** Condensate drain connection
- 8** Water connections
- 9** Fixing slots
- 10** Main condensate drain pan for horizontal installation
- 11** Main condensate drain pan for vertical installation

Yardy		a	b	c	d	e
10-20-25-30-40	mm	280	51	105	354	148
45-55-58-60-80	mm	280	51	105	354	148
24-34	mm	290	59	111	347	148
48-74-88	mm	290	59	111	347	148

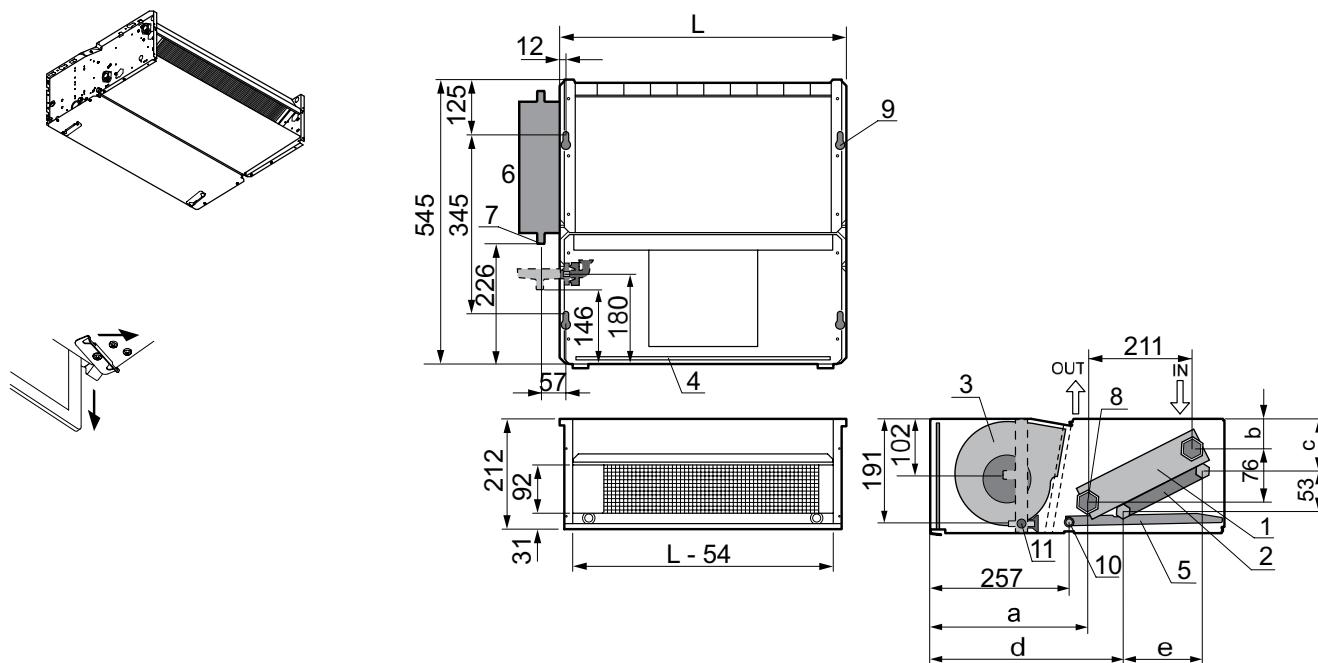
Connections

3/4" main female gas coil
1/2" additional female gas coil

Condensate drainage external diameter 16mm

5.4 Horizontal recessed or ductable installation

Yardy EV3 - Yardy-I EV3 version IXP YardyDUCT2, Yardy-ID2 version CXP



Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
L	mm	450	550	750	950	1250

YardyDUCT2		-	-	-	40-48	58-60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	-	-	-	950	1250

- 1** Standard coil
- 2** Additional coil (accessory)
- 3** Fan
- 4** Filter
- 5** Main condensation drain pan
- 6** Auxiliary condensation drain pan (accessory)
- 7** Condensate drain connection
- 8** Water connections
- 9** Fixing slots
- 10** Main condensate drain pan for horizontal installation
- 11** Main condensate drain pan for vertical installation

Yardy		a	b	c	d	e
10-20-25-30-40	mm	280	51	105	354	148
45-55-58-60-80	mm	280	51	105	354	148
24-34	mm	290	59	111	347	148
48-74-88	mm	290	59	111	347	148

Connections

3/4" main female gas coil
1/2" additional female gas coil

Condensate drainage external diameter 16mm

5.5 Dimensions and volume of accessories

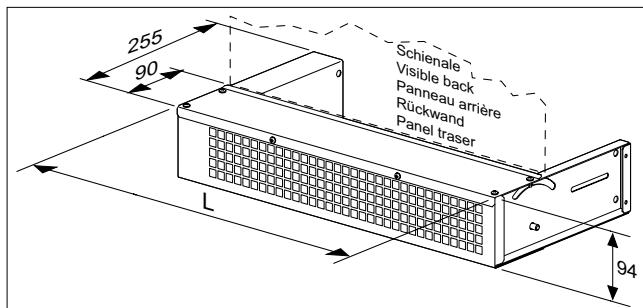
Damper

KS Manually operated damper for outdoor air intake for the MVP version to be used with the KPC support feet accessory.

KSM Motorised damper for outdoor air intake (for the MVP versions to be used with KPC support feet accessory and with IVP, IVF, IXP and DUCT versions), with a limit switch contact to indicate the completely open state.

Power supply 230-1-50 V-ph-Hz.

The installer is responsible for the switch control.

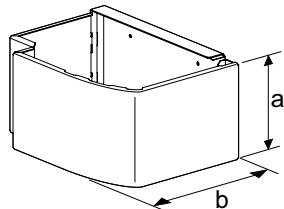


Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	400	500	700	900	1200

Support feet

KPC for Yardy-EV3 Yardy-I EV3

Only MVP version



a	mm	100
b	mm	150

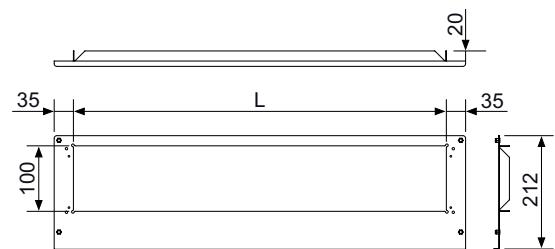
Plenum and fitting for built-in and ducted versions

Only for version IVP - IVF - IXP e YardyDUCT2, Yardy-ID2

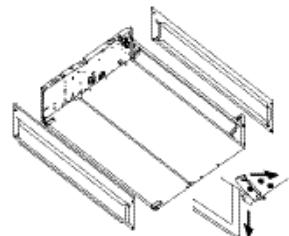
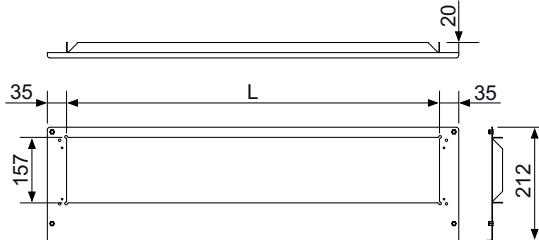
KFGCM Flanged frame for connection to the flow duct for versions IXP, IVP, DUCT

KFGCA Flanged frame for connection to the intake duct for IXP, IVP, DUCT versions

KFGCM

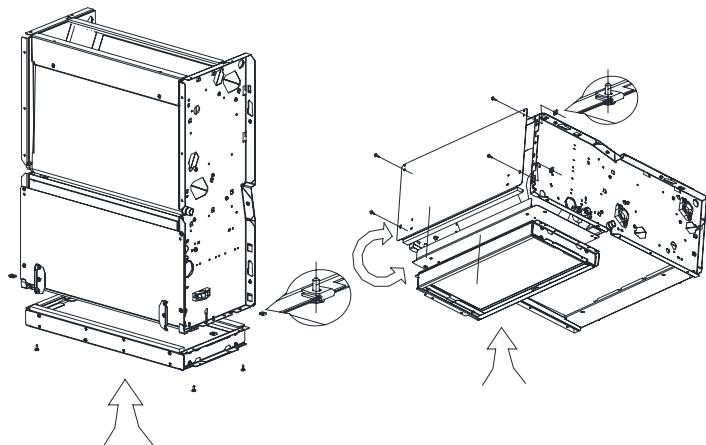


KFGCA

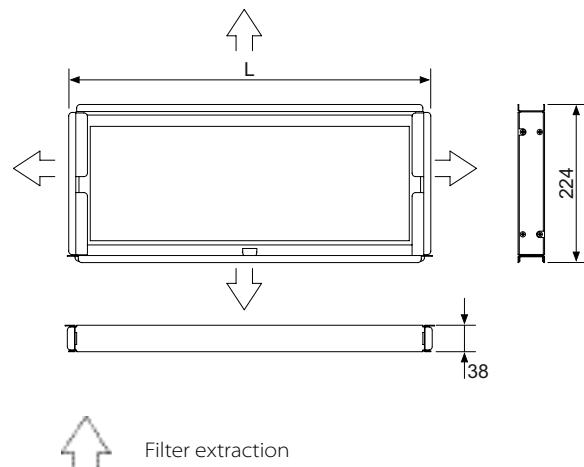


Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	400	500	700	900	1200

KFAC Frame with filter (G2) that can be extracted in any direction.

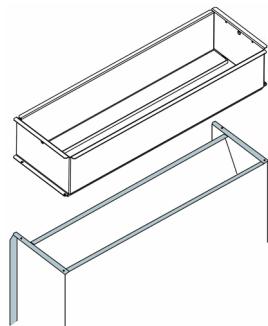


Only IXP version



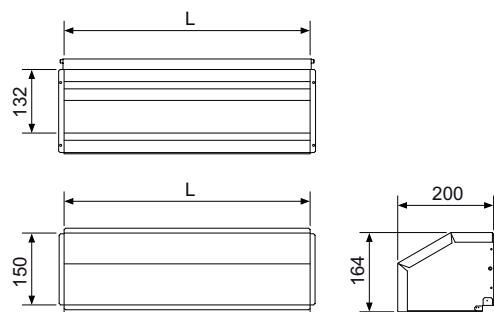
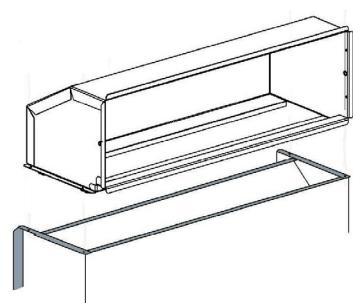
Yardy-EV3	15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3	-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2	-	-	-	40-48	60-74-80-88
Yardy-ID2	-	-	-	40-48	60-74-80-88
L	mm	420	520	720	920
					1220

KRDM Straight fitting in flow made of galvanised sheet metal, for built-in versions IVP, IXP, CXP.



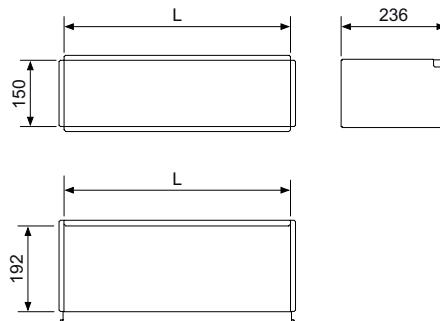
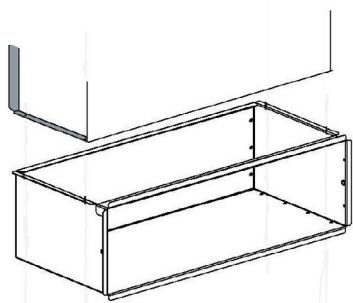
Yardy-EV3	15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3	-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2	-	-	-	40-48	60-74-80-88
Yardy-ID2	-	-	-	40-48	60-74-80-88
L	mm	410	510	710	910
					1210

KR9M Outlet 90° connection made of galvanised sheet metal, for recessed versions IVP, IXP, CXP.



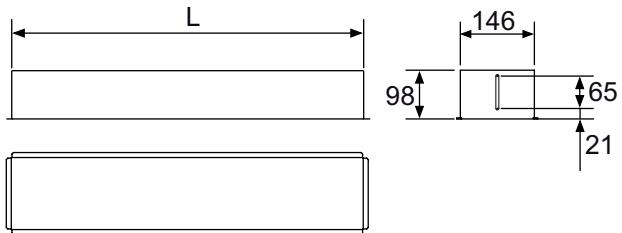
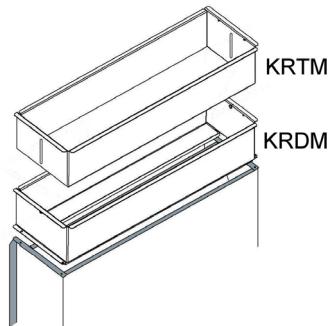
Yardy-EV3	15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3	-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2	-	-	-	40-48	60-74-80-88
Yardy-ID2	-	-	-	40-48	60-74-80-88
L	mm	410	510	710	910
					1210

KR9A Inlet 90° connection made of galvanised sheet metal, for recessed versions IVP, IVF, IXP, CXP.



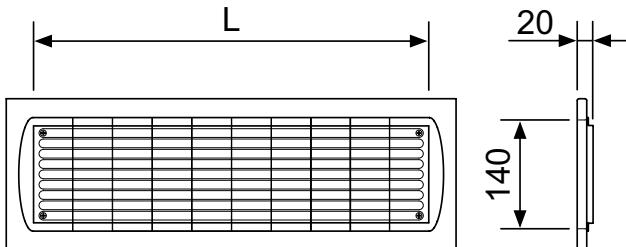
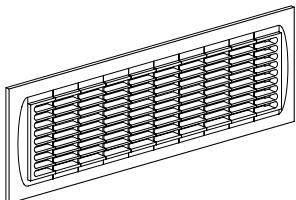
Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	410	510	710	910	1210

KRTM Telescopic fitting (between 21 and 86 mm) in flow/intake made of galvanised sheet metal, for connection to fittings KRDM, KR9M and KR9A only.



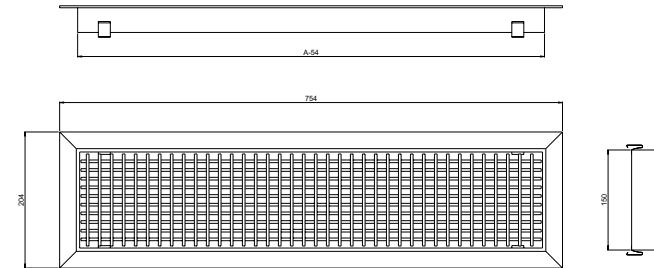
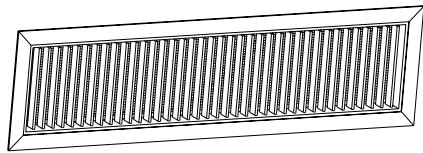
Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	405	505	705	905	1205

KGFw Intake grid with filter for fittings KRDM, KR9M, KR9A, KRTM.
KGw Flow grid with filter for fittings KRDM, KR9M, KR9A, KRTM.



Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
L	mm	410	510	710	910	1210

KGMD Aluminium delivery nozzle (supplied separately - only for IVP, IXP versions with KRDM - KRTM fittings)

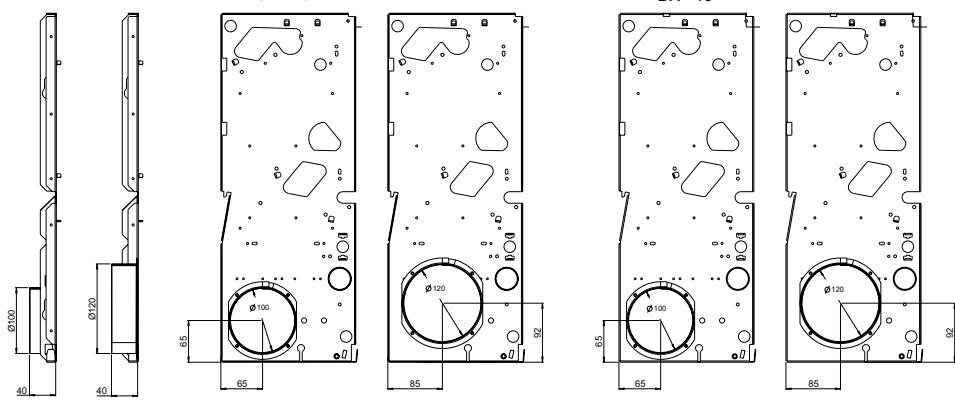
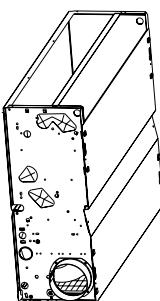


Yardy-EV3	20-24	25-30-34	40-45-48
Yardy-I EV3	20-24	30-34	45-48
YardyDUCT2	-	-	40-48
Yardy-ID2	-	-	40-48
A	mm	500	700
			900

Return air flange

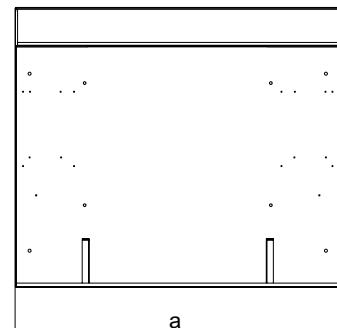
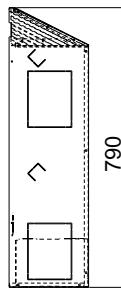
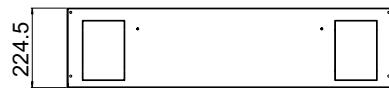
Ø10cm – Air inlet hole on the wiring side (only for IXP-IVP-IVF-CXP versions)

Ø12cm - Air inlet hole on the hydraulic connections side (only horizontal installation IXP-CXP version)



KCASE Casing for recessed wall or false ceiling installation (supplied separately - only for IVP, IXP, CXP versions)

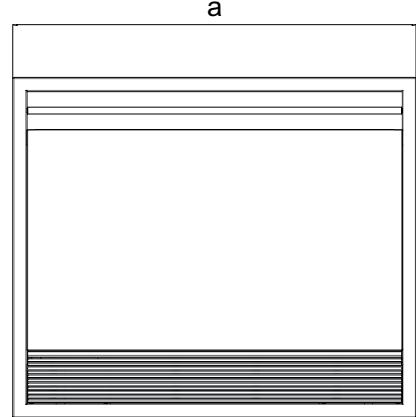
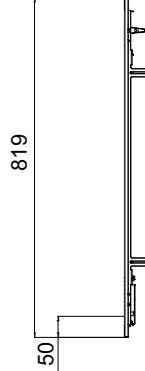
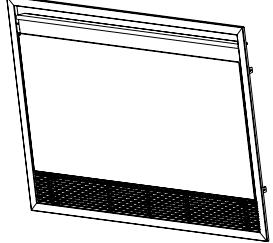
Galvanised sheet steel casing to install the fan coil in a recessed wall or false ceiling installation, equipped with pre-cut holes to pass the pipes, support feet of the unit and anti-intrusion grille.



Yardy-EV3		20-24	25-30-34	40-45-48
Yardy-I EV3		20-24	30-34	45-48
YardyDUCT2		-	-	40-48
Yardy-ID2		-	-	40-48
a	mm	919	1123	1323

KPV CASE - COVER aesthetic panel for a wall-mounted casing, with an air delivery and return grille (supplied separately - only for IVP, IXP versions with KCASE)

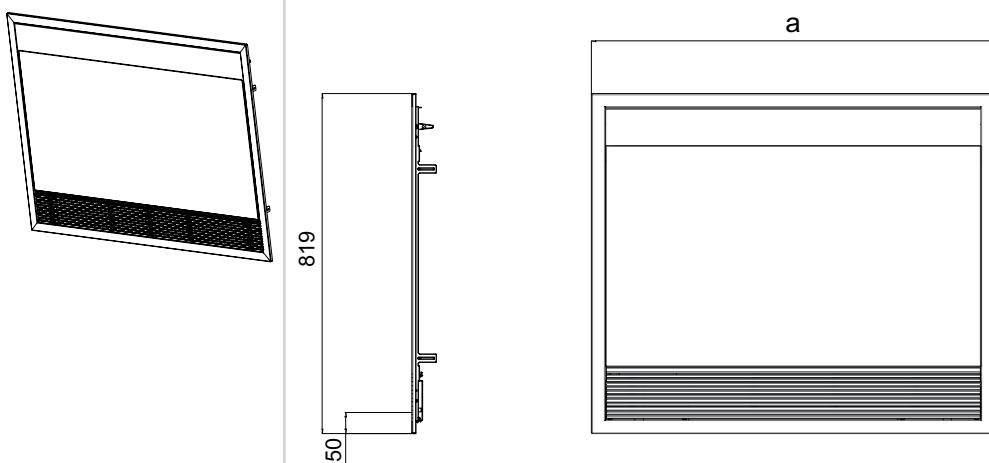
Wall-mounted aesthetic panel for casing, with a frame, intake grille and swivel delivery fin 180°, matte white RAL 9003 colour.



Yardy-EV3		20-24	25-30-34	40-45-48
Yardy-I EV3		20-24	30-34	45-48
a	mm	973	1173	1373

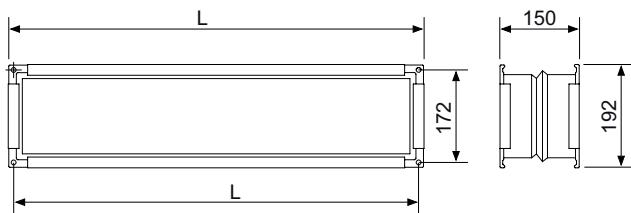
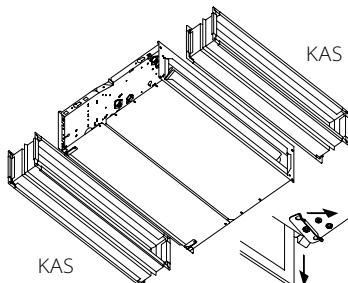
KPXCASE - COVER aesthetic panel for a casing, with an air inlet grille (supplied separately - only for IVP, IXP, CXP versions with KCASE and KRDM - KRTM fittings)

Wall or ceiling-mounted aesthetic panel for casing, with a frame and intake grille, matte white RAL 9003 colour.



Yardy-EV3		20-24	25-30-34	40-45-48
Yardy-I EV3		20-24	30-34	45-48
YardyDUCT2		-	-	40-48
Yardy-ID2		-	-	40-48
a	mm	973	1173	1373

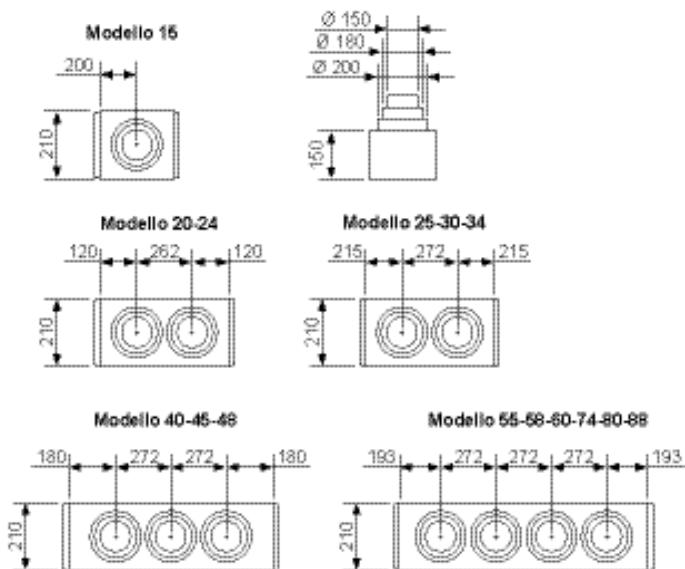
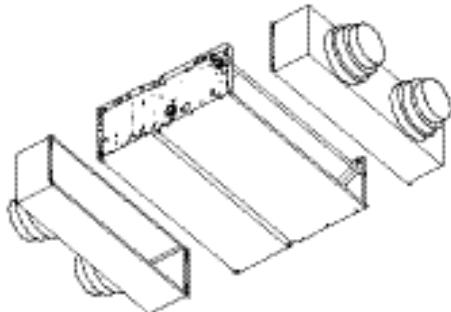
KAS Anti-vibration fitting for connection to the flow/intake duct (to be used with KFGCM - KFGCA).



Yardy-EV3		15	20-24	25-30-34	40-45-48	55-58-60-74-80-88
Yardy-I EV3		-	20-24	30-34	45-48	60-74-80-88
YardyDUCT2		-	-	-	40-48	60-74-80-88
Yardy-ID2		-	-	-	40-48	60-74-80-88
a	mm	470	570	770	970	1270

KPAF Intake plenum with circular nozzles (\varnothing 150-180-200 mm) for versions IVP, IXP and DUCT

KPM Flow plenum, insulated internally, with circular nozzles (\varnothing 150-180-200 mm) for versions IVP, IXP and DUCT



Plenum and fittings use examples

A Outlet 90° connection KR9M

B Inlet 90° connection KR9A

C Outlet straight connection KRD^M

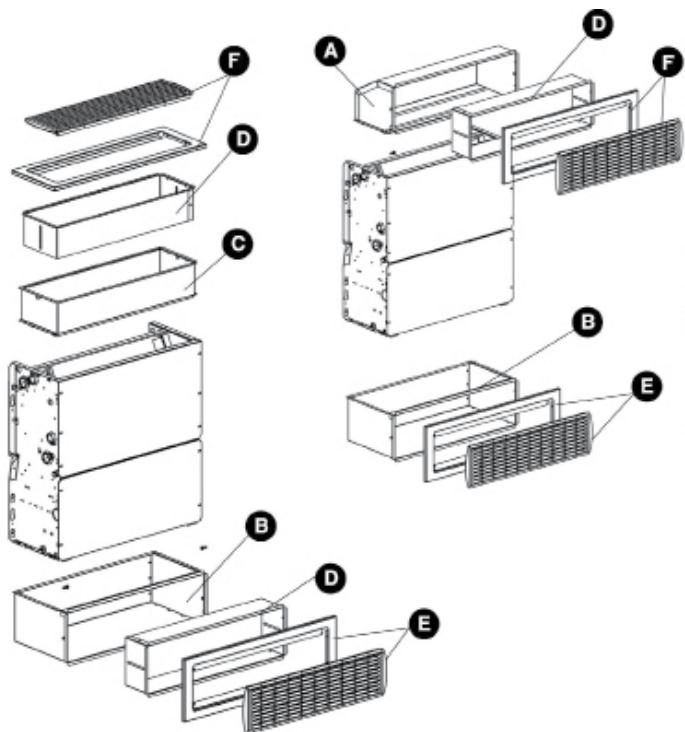
D Outlet/inlet telescopic connection KRTM

E Inlet grille with filter KGF^w

F Outlet grille KG^w



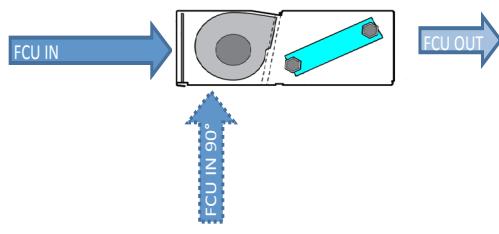
The routine maintenance operations of recessed and ductable versions (IVP, IVF, IXP, CXP) installed with KPLV-KPLO, KRD^MKR9M- KR9A-KRTM-KGF accessories are facilitated by removing the filter supplied with the unit and using the filter in the inlet grille. If the KPAF-KPM accessory is present, access to the filter must be guaranteed for periodic cleaning.



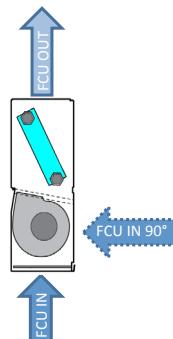
Plenum and fittings assembly configuration table

Accessory	Description	Versions	Can be connected to:	Positioning	Assembly diagram
KFGCM	Flanged frame in flow	IXP-IVP-CXP	FCU OUT, KFAC	Flow only	
KFGCA	Flanged frame in intake	IXP-IVP-IVF-CXP	FCU IN, KFAC	Intake only	
KFAC	Frame with G2 filter	IXP IVP IVF CXP	FCU IN FCU IN 90°	Front intake or lower intake	
KAS	Antivibration connection	IXP-IVP-IVF-CXP	KFGCA, KFGCM	Flow/intake With KFGCM/KFGCA	
KRDM	Outlet straight connection	IXP-IVP-CXP	FCU OUT	Flow only	
KR9M	90° fitting in flow	IXP-IVP-CXP	FCU OUT	Flow only	
KR9A	Inlet 90° connection	IXP-IVP-IVF-CXP	FCU IN	Intake only	
KRTM	Telescopic connection	IXP-IVP-IVF-CXP	KR9A, KR9M, KRDM	Flow/intake with KR9A, KR9M, KRDM only	
KGFw	Inlet grille with filter	IXP-IVP-IVF-CXP	KRTM	Intake only with KR9A, KR9M, KRDM, KRTM	
KGw	Outlet grille	IXP-IVP-IVF-CXP	KRTM	Flow only with KR9A, KR9M, KRDM, KRTM	
KGMD	Delivery nozzle	IXP-IVP-IVF-CXP	KRTM	Flow only with KR9A, KR9M, KRDM, KRTM	
KPAF	Intake plenum with nozzles	IXP-IVP-CXP	FCU IN, KFAC	Intake only	
KPM	Flow plenum with nozzles	IXP-IVP-CXP	FCU OUT	Flow only	

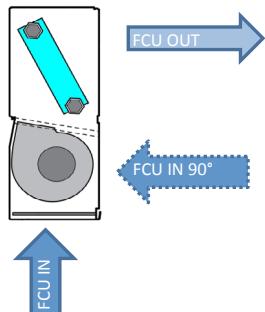
YARDY VERSION IXP DUCT



YARDY IVP VERSION



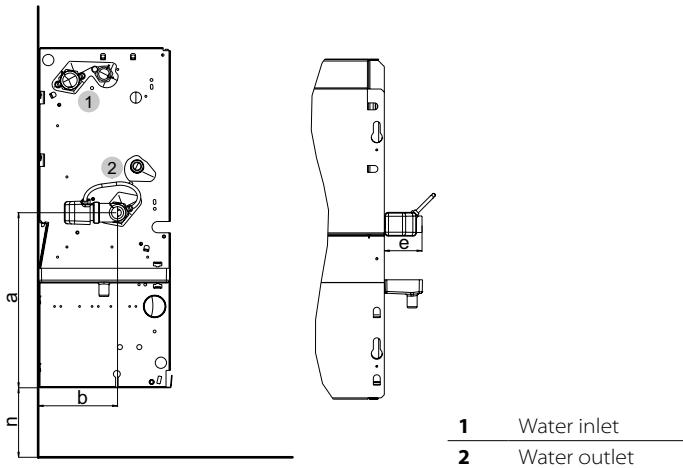
YARDY IVF VERSION



5.6 Valve dimensions and clearances

2-way ON/OFF electrovalve

KE2-2V, E2-2V - 2-way ON/OFF electrovalve for 2-pipe systems



Yardy - Yardy-I		a	b	e
15-20-25-30-40	mm	280	127	57
45-55-58-60-80	mm	280	127	60
24-34	mm	290	135	57
48-74-88	mm	290	135	60

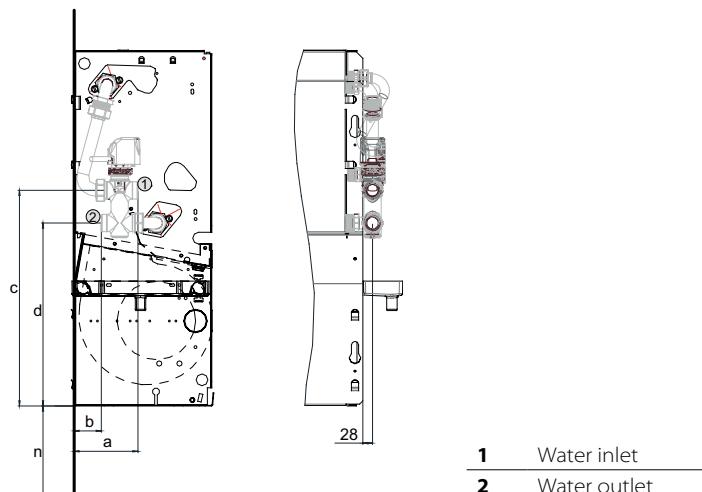
YardyDUCT - Yardy-ID		a	b	e
40-60-80	mm	280	127	60
48-74-88	mm	290	135	60

n ≥ 100 MVP, MXP, MVT + KPP/KPPG, MXT + KPP/KPPG

n = 0 MVT, MXT

3-way ON/OFF electrovalve

KE2, E2 - 3-way ON/OFF electrovalve for 2-pipe systems



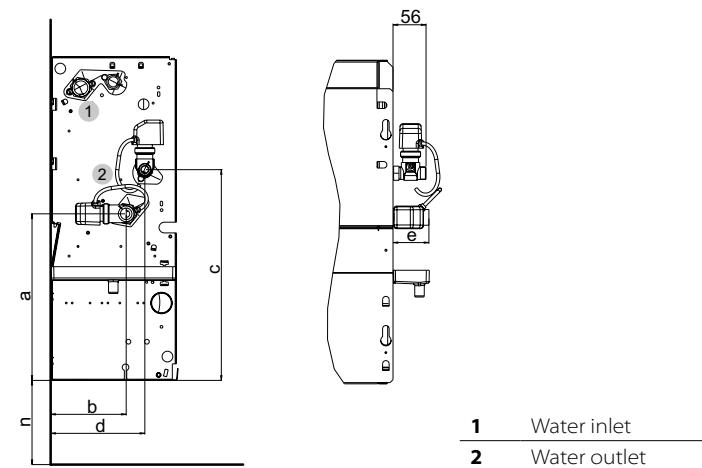
Yardy - Yardy-I		a	b	c	d
15-20-25-30-40	mm	94	42	315	280
45-55-58-60-80	mm	98	42	330	280
24-34	mm	102	50	324	289
48-74-88	mm	106	50	339	289

YardyDUCT - Yardy-ID		a	b	c	d
40-60-80	mm	98	42	315	280
48-74-88	mm	106	50	339	289

n ≥ 100 MVP, MXP, MVT + KPP/KPPG, MXT + KPP/KPPG

n = 0 MVT, MXT

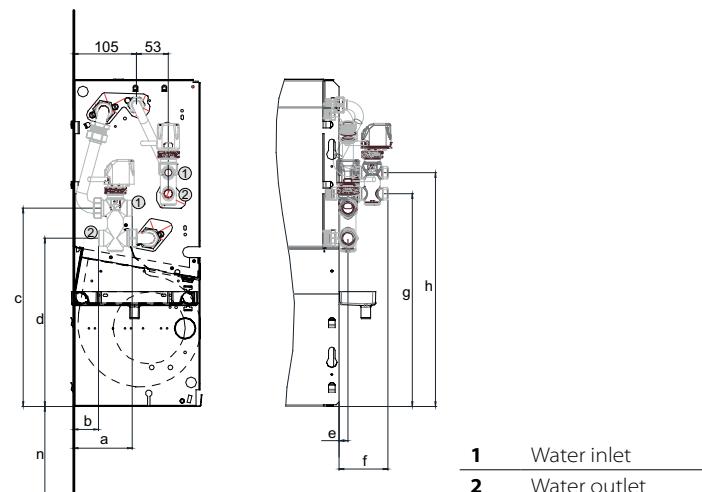
KE4-2V, E4-2V - 2-way ON/OFF electrovalve for 4-pipe systems



Yardy - Yardy-I		a	b	c	d	e
15-20-25-30-40	mm	280	127	354	158	57
45-55-58-60-80	mm	280	127	354	158	60
24-34	mm	290	135	347	164	57
48-74-88	mm	290	135	347	164	60

YardyDUCT - Yardy-ID		a	b	c	d	e
40-60-80	mm	280	127	354	158	60
48-74-88	mm	290	135	347	164	60

KE4, E4 - 3-way ON/OFF electrovalve for 4-pipe systems

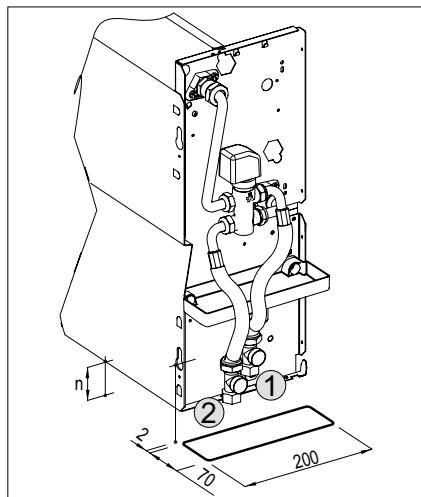


Yardy - Yardy-I		a	b	c	d	e	f	g	h
15-20-25-30-40	mm	94	42	315	280	28	155	347	382
45-55-58-60-80	mm	98	42	330	280	28	160	347	382
24-34	mm	102	50	324	289	28	155	347	382
48-74-88	mm	106	50	339	289	28	160	347	382

YardyDUCT - Yardy-ID		a	b	c	d	e	f	g	h
40-60-80	mm	94	42	315	280	28	155	347	382
48-74-88	mm	106	50	339	289	28	160	347	382

Vertical and horizontal versions**2-pipe systems**

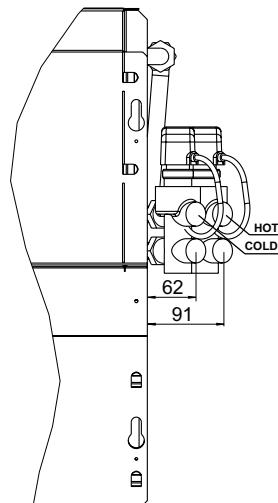
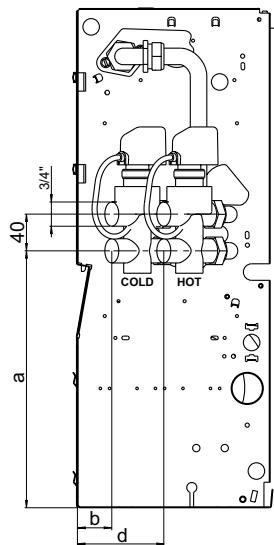
KE2DD, E2DD - ON/OFF 3-way electrovalve with hoses on system side and straight balancing valve

CONNECTION WITH FLOOR MOUNTED PIPES**1** Water inlet**2** Water outlet**NOTE**

- The auxiliary condensate drain pan accessory (KVAV-VAV for vertical versions and KVAO-VAO for horizontal versions) must be requested separately.
- The minimum radius of the flexible hoses must not be less than 50 mm.

Vertical and horizontal versions**4-pipe systems**

KE2X4, E2X4 - 4-way ON / OFF solenoid valves for 4-pipe systems, for single-battery units



Yardy - Yardy-I		a	b	d
15-20-25-30-40	mm	280	47	104
45-55-58-60-80	mm	280	47	104
24-34		2809	38	95
48-74-88		289	38	95
YardyDUCT - Yardy-ID		a	b	d
40-60-80		280	47	104
48-74-88		289	38	95

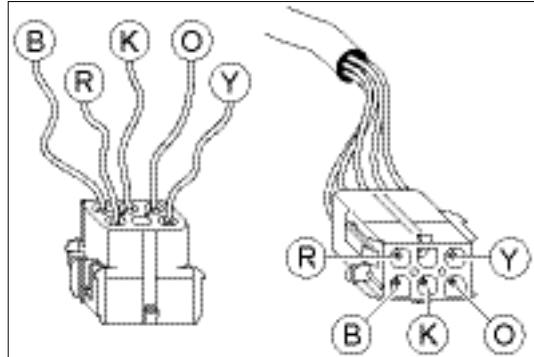
5.7 Connection pressure drops and dimensions

Plant type	Valve accessory designation	Valves quantity present in the accessory	Valve type ON/OFF	Battery type	Diameter valve connections	Models: Yardy Yardy-I	Models: Yardy Duct Yardy-ID	Water flow rate [l/h]													
								100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400
Pressure drops (kPa)																					
2-pipe	KE2, E2	1	3-way	Main	1/2"	15÷40	-	0,6	2,4	5,3	9,5	14,8	21,3	29	38	48	-	-	-	-	-
					3/4"	45÷88	40÷88	-	-	-	4,1	6,4	9,2	13	16	21	26	31	37	43	50
	KE2-2V, E2-2V	1	2-way	Main	1/2"	15÷40	-	0,6	2,4	5,3	9,5	14,8	21,3	29	38	48	-	-	-	-	-
					3/4"	45÷88	40÷88	-	-	-	4,1	6,4	9,2	13	16	21	26	31	37	43	50
4-pipe	KE2DD, E2DD	1	3-way+holder	Main	1/2"	15÷40	-	1,6	6,4	14,5	25,8	40,3	58	79	103	131	-	-	-	-	-
					3/4"	45÷88	40÷88	-	-	-	18,4	28,7	41,3	56	73	93	115	139	165	194	225
	KE4, E4	2	3-way	Main	1/2"	15÷40	-	0,6	2,4	5,3	9,5	14,8	21,3	29	38	48	-	-	-	-	-
					3/4"	45÷88	40÷88	-	-	-	4,1	6,4	9,2	13	16	21	26	31	37	43	50
4-pipe	KE4-2V, E4-2V	2	2-way	Main	1/2"	15÷40	-	0,6	2,4	5,3	9,5	14,8	21,3	29	38	48	-	-	-	-	-
					3/4"	45÷88	40÷88	-	-	-	4,1	6,4	9,2	13	16	21	26	31	37	43	50
	KE4DD, E4DD	2	3-way+holder	Main	1/2"	15÷40	-	1,6	6,4	14,5	25,8	40,3	58	79	103	131	-	-	-	-	-
					3/4"	45÷88	40÷88	-	-	-	18,4	28,7	41,3	56	73	93	115	139	165	194	225
	KE2X4, E2X4	1	4-way	Main	3/4"	15÷88	40÷88	1,6	6,4	14,5	25,8	40,3	58	79	103	131	-	-	-	-	-

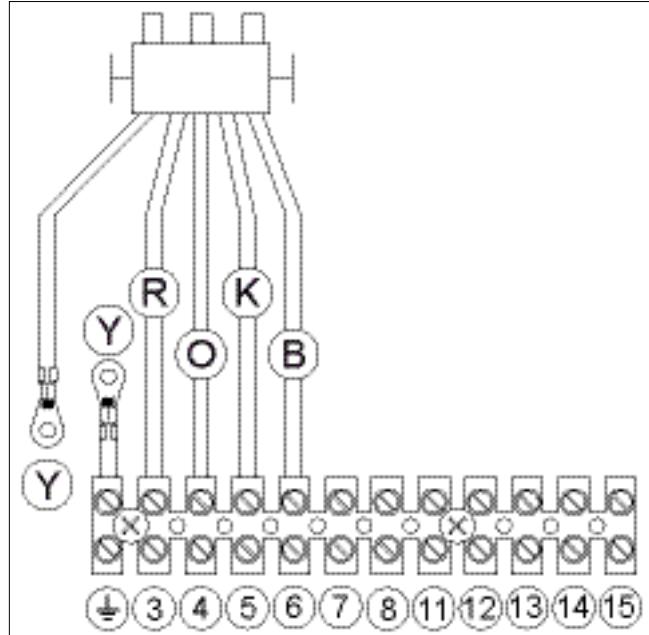
6. Electrical connections

6.1 Yardy-EV3

Versions MVP-MVT



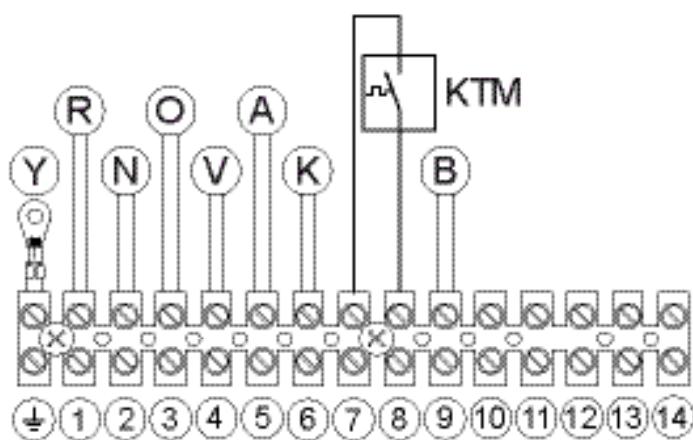
Versions Yardy-EV3 MXP-MXT-IVP-IVF-IXP



NOTE

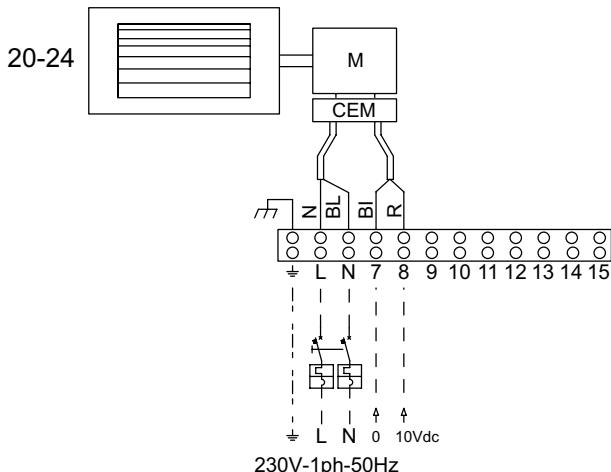
When mounting command KC or KTA drives MXP / MXT installed vertically, this wiring and its label must be removed.

6.2 YardyDUCT CXP version

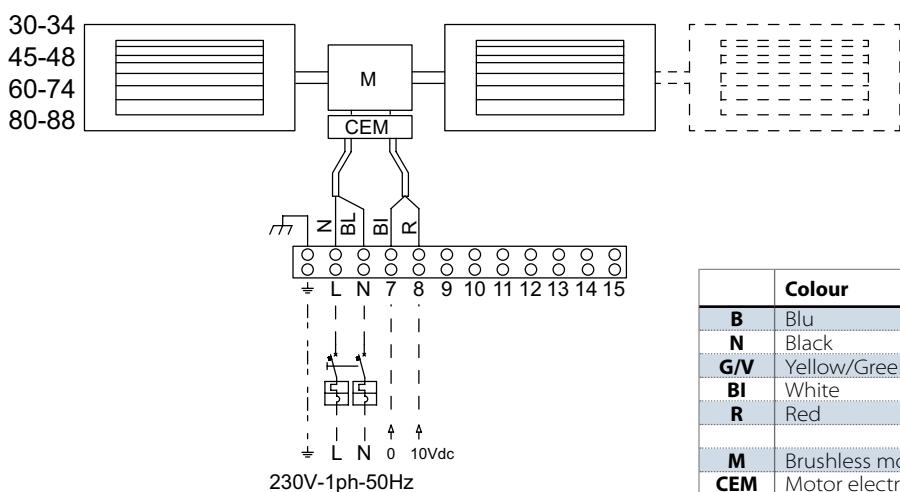


	Colour	DUCT
B	Blu	Common
K	Black	Speed VI (max)
A	Grey	Speed V
V	Violet	Speed IV
O	Orange	Speed III
N	Brown	Speed II
R	Red	Speed I (min)
Y	Yellow/Green	
KTM	Minimum temperature thermostat (accessory)	

6.3 Yardy-I EV3 - Yardy-ID2



- Data for connecting an external controller to the fan coil.
- Motor input impedance 100 KOhm. Signal 0-10 Vdc.
- Start-up limit 1V.
- Shutdown limit 0.9V.
- Maximum speed 10 Vdc.



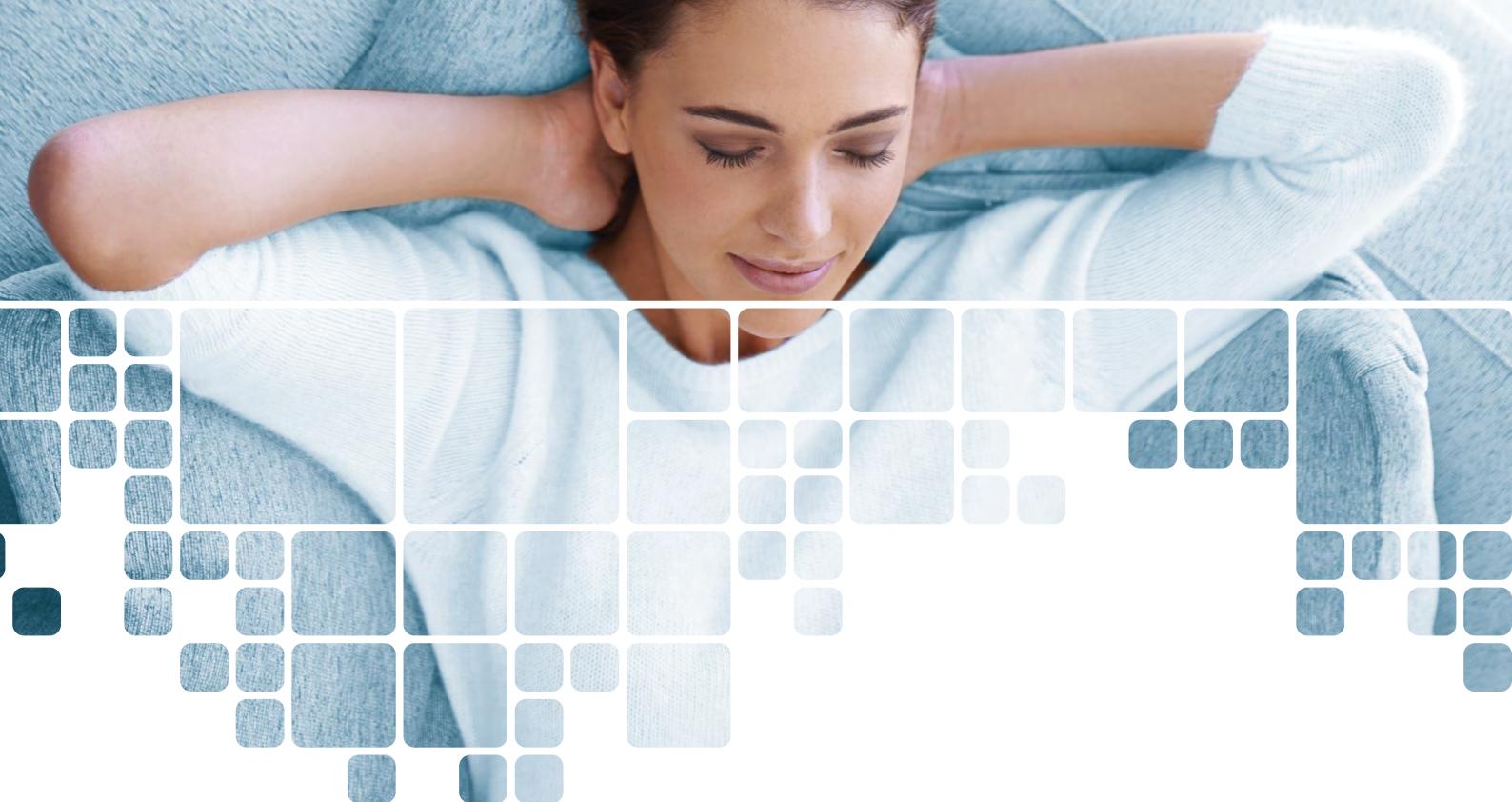
	Colour
B	Blu
N	Black
G/V	Yellow/Green
BI	White
R	Red
M	Brushless motor
CEM	Motor electronic control

NOTE

When designing and sizing the power line and protection systems for units with a brushless EC Inverter synchronous motor, pay attention to the leakage current values to earth as they are higher than those for traditional units with an asynchronous motor.

It is always advisable to keep installation of the unit under a dedicated differential protection.

The Yardy-I, Yardy-ID units with a brushless EC Inverter-type of synchronous motor, conform to the limits stipulated in standard IEC-EN 60335 with a maximum dispersion of 3.5 mA, which is permissible and imposed by the standard.



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