



COMMERCIAL & RESIDENTIAL AIR CONDITIONING PRODUCTS

Heat Recovery Unit





HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

**XRC
SERIES**

OVERVIEW AND CONSTRUCTION DETAILS

OVERVIEW :

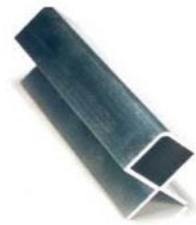
The **XRC** series of heat recuperators are fitted with a highly efficient air-air heat exchanger that makes it possible to reuse a significant amount of the heat present in the extracted air. It is therefore suitable for all those installations where a significant amount of heat can be recovered thereby making energy savings, such as in ventilation systems in shops, offices, catering premises, bars and restaurants.

CONSTRUCTION DETAILS:

- The **XRC** model is made with an aluminium profile structure and box shape panels of pre-varnished galvanized steel, internally isolated with glass wool having an average thickness of 15 mm, ideal to guarantee the maximum results for acoustic and thermal isolation.
- Static type heat exchanger, highly efficient, made with aluminium plates using cross-air flows kept separate by a suitable sealing.
- G4 class supply and extraction filter elements, wavy model, in polyester fibre with a metal frame and electrically welded containment net with purposely ideated slots to facilitate maintenance and periodic substitution.
- Supply and extraction centrifugal ventilators with double aspiration removable on each side of the unit for frequent maintenance.
- One or three speed electric motors directly coupled.
- On board terminal for electrical connections and ventilators control.
- Condensation collecting basin in galvanized steel with condensation discharge.

ACCESSORIES :

Cooling or heating batteries.
Speed regulator and switch.
Electronic control system.
Supply or extraction grill.
Air load regulation damper.
Rain protection roof.
Base corner support.



**XRC MODEL
DETAIL OF VENTILATOR
INSPECTION DOOR**



**XRC MODEL
DETAIL FILTER SUBSTITUTION DOOR**



**DETAIL OF A MODEL MADE TO
CUSTOMER REQUESTS**





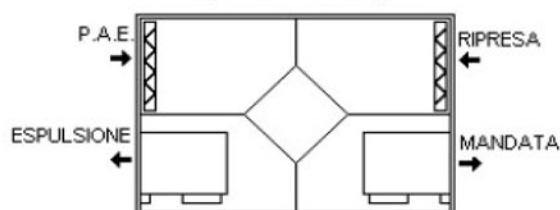
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

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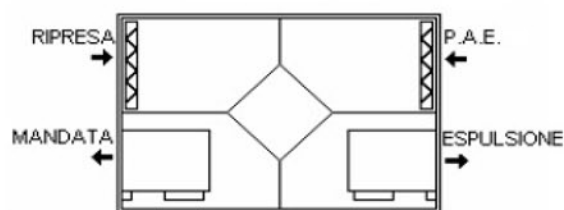
HORIZONTAL CONFIGUTATIONS

THE HORIZONTAL CONFIGURATIONS ARE FROM ABOVE VIEW

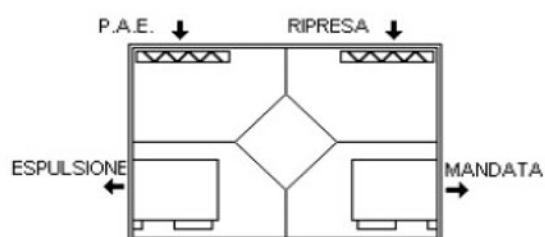
**K1 CONFIGURATION
(HORIZONTAL)**



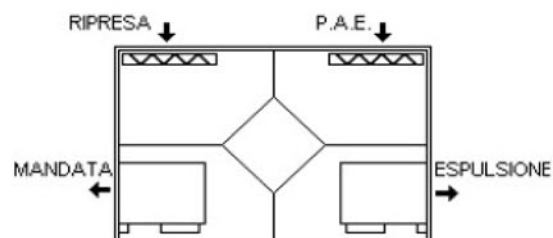
**K2 CONFIGURATION
(HORIZONTAL)**



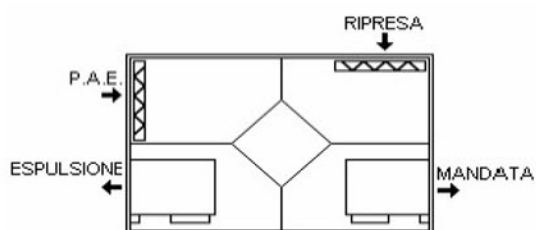
**K3 CONFIGURATION
(HORIZONTAL)**



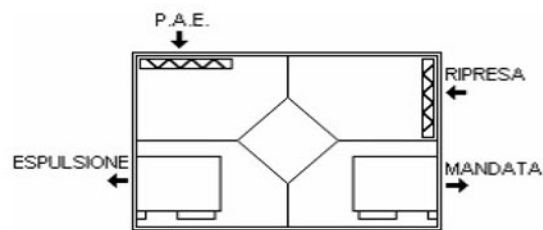
**K4 CONFIGURATION
(HORIZONTAL)**



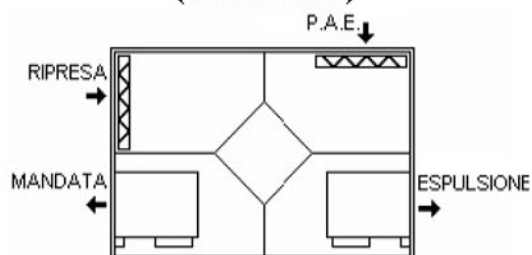
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(HORIZONTAL)**



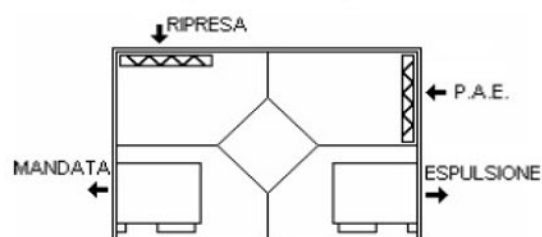
**K6 CONFIGURATION
(HORIZONTAL)**



**K7 CONFIGURATION
(HORIZONTAL)**



**K8 CONFIGURATION
(HORIZONTAL)**





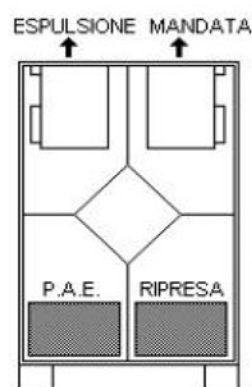
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

HORIZONTAL CONFIGUTATIONS

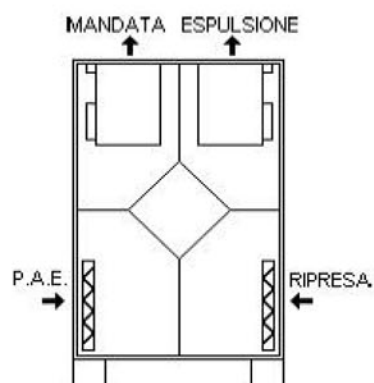
XRC
SERIES

THE SHOWN VERTICAL CONFIGURATIONS ARE SIDE-ON VIEW.

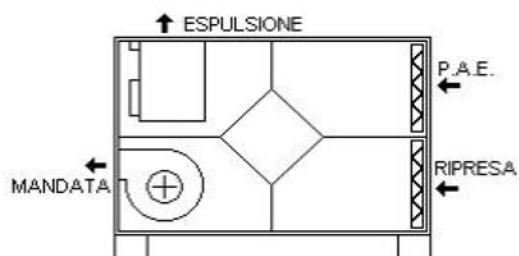
**K9 CONFIGURATION
(VERTICAL)**



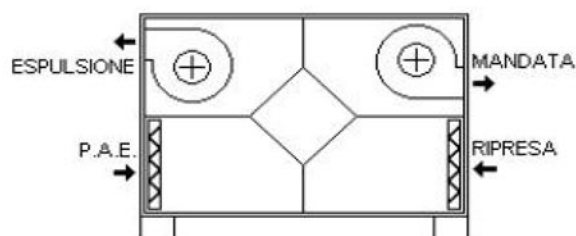
**K10 CONFIGURATION
(VERTICAL)**



**K12 CONFIGURATION
(VERTICAL)**



**K11 CONFIGURATION
(VERTICAL)**



OTHER CONFIGURATIONS UPON REQUEST



HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES


PERFORMANCE

The data in the tables indicate the performance for a nominal air load.

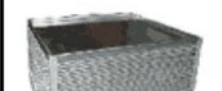

The variation in performance air load described below in relation to the size of the recuperator, is described in the tables at the end of this chapter.

The graphs for the curves of the ventilators are available upon request from our Technical Department.

XRC - XRCE RECUPERATORS GENERAL CHARACTERISTICS

	RECUPERATOR MODEL	Nominal air load [m³/h]	Supply air static pressure (*) [Pa]	Acoustic power [dB(A)] (**)
	03	250	220	53
	06	500	80	51
	10	1000	100	53
	15	1500	150	60
	20	1900	200	59
	25	2500	190	56
	30	3200	170	59
	40	4000	120	69
	50	5000	110	68
	60	6000	Δ 290	Δ 72
			Y 90	Y 71

EXCHANGERS GENERAL CHARACTERISTICS (*)

	RECUPERATOR MODEL	Recovery efficiency [%]	Air recovery thermal power [kW]	Air temperature on exit [°C]
 	03	50,0	1,50	8,40
	06	53,0	2,40	8,30
	10	54,0	4,90	8,40
	15	52,0	7,00	7,90
	20	52,0	9,40	7,90
	25	51,0	12,00	7,80
	30	51,0	15,00	7,80
	40	51,0	19,00	7,80
	50	51,0	23,00	7,70
	60	50,0	27,00	7,50

(*) Evaluated performances with nominal air load temperature on exit of 20 °C and fresh air at -5 °C.

(**) Generated noise power of each ventilator in an open space at a distance of 1 metre.




HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW


VENTILATORS

XRC
SERIES

SINGLE SPEED VENTILATOR CHARACTERISTICS EACH RECUPERATOR HOUSES TWO VENTILATORS

	RECUPERATOR MODEL	Power [W]	nr poles	I max [A]	nr speeds	Protection level [IP]	Isolation class	Power Supply [V/ph/Hz]
 1 SPEED	03	2 x 90	2	1,0	1	IP 32	B	230/1/50
	06	2 x 90	2	1,0	1	IP 32	B	230/1/50
	10	2 x 147	4	1,5	1	IP 55	F	230/1/50
	15	2 x 420	4	3,6	1	IP 55	F	230/1/50
	20	2 x 550	4	4,6	1	IP 55	F	230/1/50
	25	2 x 550	4	4,6	1	IP 55	F	230/1/50
	30	2 x 550	4	4,6	1	IP 55	F	230/1/50
	40	2 x 1100	6	10	1	IP 20	F	230/1/50
	50	2 x 1100	6	10	1	IP 20	F	230/1/50
	60	2 x 1500	4	5,4	1	IP 20	F	400/3/50

THREE SPEED VENTILATOR CHARACTERISTICS EACH RECUPERATOR HOUSES TWO VENTILATORS

	RECUPERATOR MODEL	Power [W]	nr poles	I max [A]	nr speeds	Protection level [IP]	Isolation Class	Power Supply [V/ph/Hz]
 3 SPEED	03	2 x 60	2	1,0	3	IP 32	B	230/1/50
	06	2 x 60	2	1,0	3	IP 32	B	230/1/50
	10	2 x 147	4	1,5	3	IP 44	F	230/1/50
	15	2 x 350	4	2,8	3	IP 55	F	230/1/50
	20	2 x 550	4	5,4	3	IP 55	F	230/1/50
	25	2 x 550	4	5,4	3	IP 55	F	230/1/50
	30	2 x 550	4	5,7	3	IP 10	F	230/1/50
	40	2 x 736	6	7,4	3	IP 20	F	230/1/50
	50	2 x 736	6	6,8	3	IP 20	F	230/1/50

(*) Evaluated performances with nominal air load temperature on exit of 20 °C and fresh air at -5 °C.

(**) Irradiated noise without dampening of panels.




HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

ACCESSORIES

XRC
SERIES

G4 FILTER CHARACTERISTICS

	RECUPERATOR MODEL	filter code	filtering efficiency	Front air velocity [m/s]	Dimensions [mm]
	03	FO48150200	EU4-G4	2,3	200x150x48
	06	FO48200300	EU4-G4	2,3	300x200x48
	10	FO48300400	EU4-G4	2,3	400x300x48
	15	FO48400300	EU4-G4	3,5	400x300x48
	20	FO48400400	EU4-G4	3,3	400x400x48
	25	FO48400500	EU4-G4	3,5	500x400x48
	30	FO48400500	EU4-G4	4,4	500x400x48
	40	FO48500500	EU4-G4	4,4	500x500x48
	50	FO48500625	EU4-G4	4,4	625x500x48
	60	FO48500625	EU4-G4	4,4	625x500x48

Normally available in stock as spare parts.




HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

ACCESSORIES


XRC SERIES

POST-HEATING WATER BATTERIES XRC and XRCE

IMAGE	RECUPERATOR	POST HEATING BATT.	GEOMETRY	N°ROWS/N° TUBES PER ROW	BLADE PITCH (mm)	THERMAL YIELD (kW)	WATER TEMP. ON EXIT (°C)	PRESSURE LOSS AIR SIDE (Pa)	PRESSURE LOSS WATER SIDE (kPa)	COLLECTOR DIAMETER	WEIGHT (kg)
	10	BPS 10	30x30	2 / 10	2,5	9,8	36,3	45	13,6	3/4	5
	15	BPS 15	30x30	2 / 11	2,5	13,9	34,8	50	5,3	3/4	7
	20	BPS 20	30x30	2 / 14	2,5	18,5	34,6	57	10,8	3/4	8
	25	BPS 25	30x30	2 / 14	2,5	23,5	35,1	57	20,6	3/4	9
	30	BPS 30	30x30	2 / 16	2,5	27,8	33,1	72	9,5	1	10
	40	BPS 40	30x30	2 / 20	2,5	35,8	33,8	70	19,6	1	12
	50	BPS 50	30x30	2 / 20	2,5	46,4	34,8	60	19,7	1	15
	60	BPS 60	30x30	2 / 20	2,5	51,7	32,8	83	23,7	1	15

Sizes chosen with the following conditions: water 70/60 °C, immitted air 8 °C, nominal air load.

XRC e XRCE POST-HEATING ELECTRIC BATTERIES

IMAGE	RECUPERATOR	POST HEATING BATT.	RESISTANCE (kW)	POWER SUPPLY (V)	N° ROWS	ABSORPTION [A]	AIR TEMP. ON EXIT (°C)	DIMENSIONS (mm)	WEIGHT (kg)
	03	BPE 03	2,0	230/1/50	3	8,7	28,4	300 x 140 x 150	2
	06	BPE 05	4,0	230/1/50	3	17,4	27,8	300 x 140 x 150	2
	10	BPE 10	4,5	400/3/50	3	6,5	21,3	350 x 240 x 150	3
	15	BPE 15	6,0	400/3/50	3	8,7	20,7	350 x 240 x 150	3
	20	BPE 20	9,0	400/3/50	3	13,0	22,0	360 x 340 x 150	3
	25	BPE 25	12,0	400/3/50	3	17,3	22,2	360 x 340 x 150	3
	30	BPE 30	12,0	400/3/50	3	17,3	19,5	360 x 340 x 150	3
	40	BPE 30	12,0	400/3/50	3	17,3	19,5	500 x 400 x 150	5
	50	BPE 30	12,0	400/3/50	3	17,3	19,5	500 x 400 x 150	5
	60	BPE 60	12,0	400/3/50	3	17,3	19,5	500 x 400 x 150	5

Sizes chosen with the following conditions: immitted air at 8 °C, nominal air load.




HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

ACCESSORIES

XRC SERIES


VARIATOR FOR SINGLE SPEED MOTORS

	RECUPERATOR MODEL	Variator Code	Maximum Absorption [A]	Power Supply [V/ph/Hz]
	03	XRC-RVM03A	3	230/1/50
	05	XRC-RVM03A	3	230/1/50
	10	XRC-RVM03A	3	230/1/50
	15	XRC-RVM05A	5	230/1/50
	20	XRC-RVM05A	5	230/1/50
	25	XRC-RVM05A	5	230/1/50
	30	XRC-RVM05A	5	230/1/50
	40	XRC-RVM20A	20	230/1/50
	50	XRC-RVM20A	20	230/1/50

For single speed motors, allows a constant regulation of the number of revolutions of the motor.

Includes ON-Off switch


THREE SPEED MOTOR COMMUTATOR

	RECUPERATOR MODEL	Commutator Code	Maximum Absorption [A]	Power Supply [V/ph/Hz]
	03	XRC-RVC4P	6	230/1/50
	05	XRC-RVC4P	6	230/1/50
	10	XRC-RVC4P	6	230/1/50
	15	XRC-RVC4P	6	230/1/50
	20	XRC-RVC4P	6	230/1/50
	25	XRC-RVC4P	6	230/1/50
	30	XRC-RVC4P	6	230/1/50
	40	XRC-RVC4P	6	230/1/50
	50	XRC-RVC4P	6	230/1/50

Used for motors with three speeds. Need to specify during order processing if this motor is required.

Includes Off position

STAR / TRIANGLE COMMUTATOR

	RECUPERATOR MODEL	Commutator Code	Maximum Absorption [A]	Power supply [V/ph/Hz]
	60	XRC-CDP380	5,4	400/3/50

Specific for tri-phase motors




HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW


ACCESSORIES

XRC SERIES


50mm PITCH GRILLES

IMAGE	RECUPERATOR MODEL	Grille Code	Front air velocity [m/s]	Dimensions [mm]
	03	GI200190	2,3	200x190
	06	GI300190	2,3	300x190
	10	GI400290	2,3	400x290
	15	GI400290	3,5	400x290
	20	GI400390	3,3	400x390
	25	GI500390	3,5	500x390
	30	GI500390	4,4	500x390
	40	GI500490	4,4	500x490
	50	GI625490	4,4	625x490
	60	GI625490	4,4	625x490

50mm PITCH GRILLES WITH BIRD NET

IMAGE	RECUPERATOR MODEL	Grille Code	Front air velocity [m/s]	Dimensions [mm]
	03	GIRE200190	2,3	200x190
	06	GIRE300190	2,3	300x190
	10	GIRE400290	2,3	400x290
	15	GIRE400290	3,5	400x290
	20	GIRE400390	3,3	400x390
	25	GIRE500390	3,5	500x390
	30	GIRE500390	4,4	500x390
	40	GIRE500490	4,4	500x490
	50	GIRE625490	4,4	625x490
	60	GIRE625490	4,4	625x490

50mm PITCH DAMPER

IMAGE	RECUPERATOR MODEL	Aluminium damper Code	Front air velocity [m/s]	Dimensions [mm]
	03	WM-05P200161	2,3	200x161
	06	WM-05P300211	2,3	300x200
	10	WM-05P400311	2,3	400x300
	15	WM-05P400311	3,5	400x300
	20	WM-05P400311	3,3	400x400
	25	WM-05P500411	3,5	500x400
	30	WM-05P500411	4,4	500x400
	40	WM-05P500511	4,4	500x500
	50	WM-05P625511	4,4	625x500
	60	WM-05P625511	4,4	625x500




HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

ACCESSORIES

XRC SERIES

RAIN COVER

IMAGE	RECUPERATOR MODEL	Pre-varnished galvanized steel cover	Galvanized steel cover
	03	XTAXRC03	XTAXRCE03
	06	XTAXRC06	XTAXRCE06
	10	XTAXRC10	XTAXRCE10
	15	XTAXRC15	XTAXRCE15
	20	XTAXRC20	XTAXRCE20
	25	XTAXRC25	XTAXRCE25
	30	XTAXRC30	XTAXRCE30
	40	XTAXRC40	XTAXRCE40
	50	XTAXRC50	XTAXRCE50
	60	XTAXRC60	XTAXRCE60

BASE CORNER SUPPORTS (*)

IMAGE	RECUPERATOR MODEL	Base corner support in galvanized steel H 100 mm (4 pieces)
	03	XRC-F100
	06	XRC-F100
	10	XRC-F100
	15	XRC-F100
	20	XRC-F100
	25	XRC-F100
	30	XRC-F100
	40	XRC-F100
	50	XRC-F100
	60	XRC-F100

(*) It can be installed in recuperators with a vertical configuration or in those versions with a horizontal configuration for floors versions. 4 corner supports in galvanized steel H 100mm.



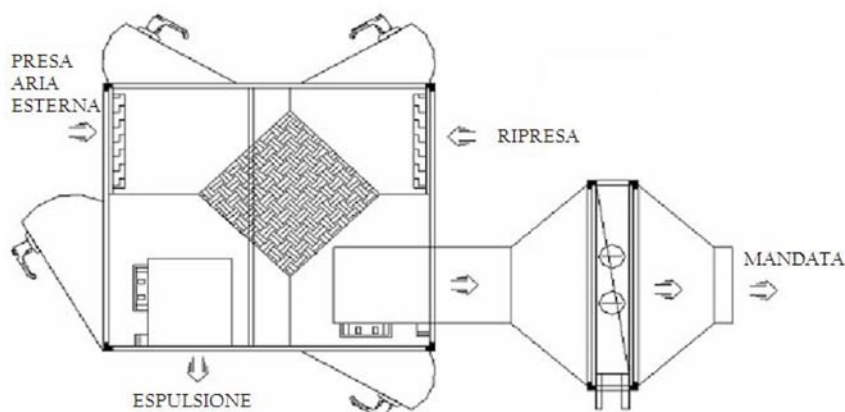
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

ACCESSORIES

XRC
SERIES

COOLING SECTION :

Allows cooling and the possibility of dehumidifying the air on exit from the recuperator unit. An exchange battery is used with copper tubing and aluminium pack with a collection basin in galvanized steel. The unit is boxed in a special aluminium profile casing and a double panel, sandwich, system insulated with glass wool. The characteristics of the frame allow the unit to be fixed into place in linear square air ducts.



Example of connection between recuperator and battery unit.

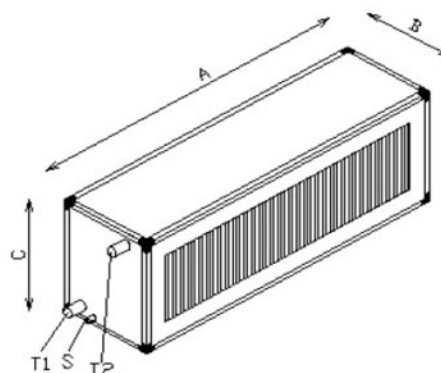
WATER COOLED BATTERIES XRC e XRCE

RECUPE- RATOR	COOLING BATT.	GEOMETRY	BLADE PITCH [mm]	COOLING YIELD [kW]	EXIT AIR TEMP. [°C]	AIR SIDE PRESSURE LOSS [Pa]	WATER SIDE PRESSURE LOSS [kPa]	WEIGHT [kg]
10	BPF 10	30x30	2,5	8,45	13,8	95	17,8	19
15	BPF 15	30x30	2,5	9,6	14,6	132	22,3	19
20	BPF 20	30x30	2,5	14,9	14,9	149	22,4	22
25	BPF 25	30x30	2,5	18,7	15,4	173	19,1	27
30	BPF 30	30x30	2,5	24,8	15	154	21	28
40	BPF 40	30x30	2,5	31,2	14,9	142	17,3	35
50	BPF 50	30x30	2,5	39,6	14,7	142	23,5	46
60	BPF 60	30x30	2,5	47,2	14,8	142	20,1	47

Sizes chosen with the following criteria: injected air at 29 °C dry bulb, U.R. 50%, water temperature of 7/12 °C.

COOLING WATER BATTERIES TABLE

Dim.	A [mm]	B [mm]	C [mm]	T1 [G]	T2 [G]	S [mm]
BPF 10	1000	200	295	¾"	¾"	1"
BPF 15	1000	200	295	¾"	¾"	1"
BPF 20	1200	250	350	1"	1"	1"
BPF 25	1400	250	350	1"	1"	1"
BPF 30	1350	250	450	1"	1"	1"
BPF 40	1050	290	650	1 ¼"	1 ¼"	1"
BPF 50	1250	290	650	1 ¼"	1 ¼"	1"
BPF 60	1450	290	650	1 ¼"	1 ¼"	1"

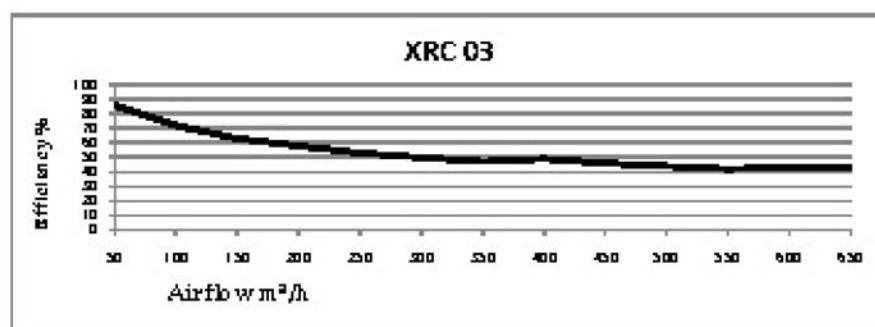




HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

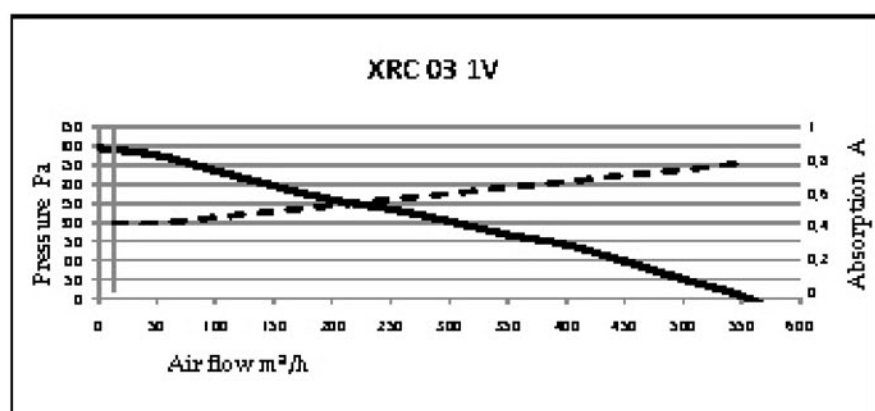
XRC
SERIES

SELECTION CURVES MODEL 03



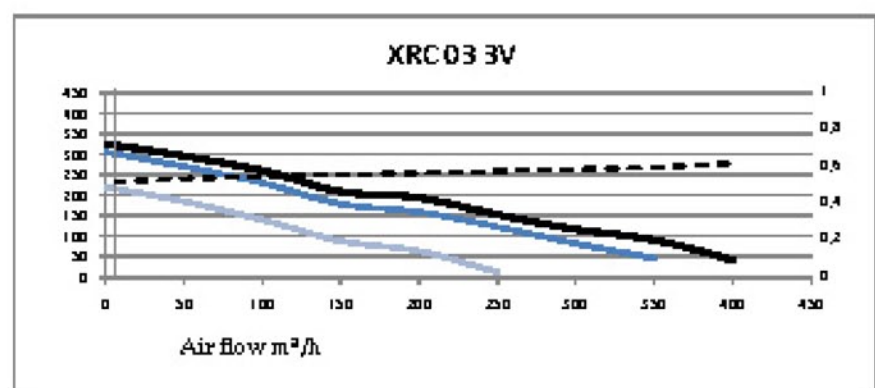
Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.

The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.

By varying the air flow, it is possible to obtain different static pressure values for the injected air. The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.



Three speed version.
Available static pressure and power absorption.

By varying the air flow, it is possible to obtain different static pressure values for the injected air. When the speed decreases so does the pressure.

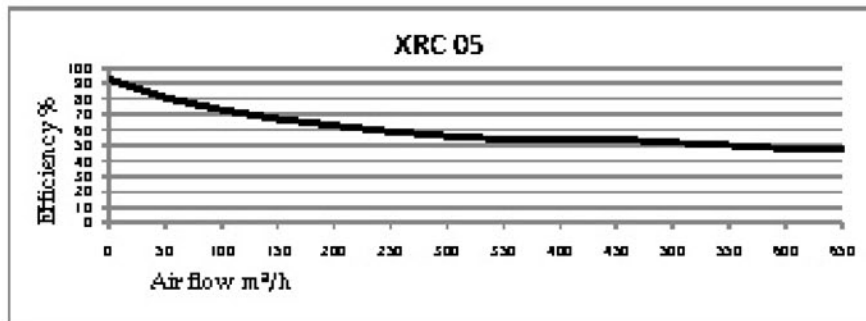
The dotted line in the diagram indicates the maximum power absorption for the correct dimensioning of the power supply system.



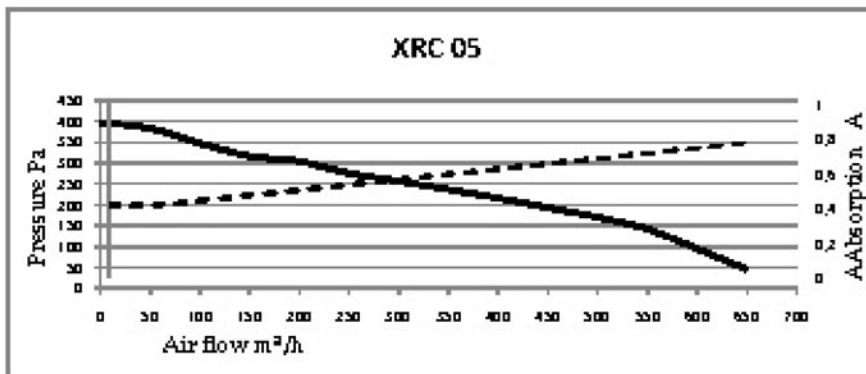
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
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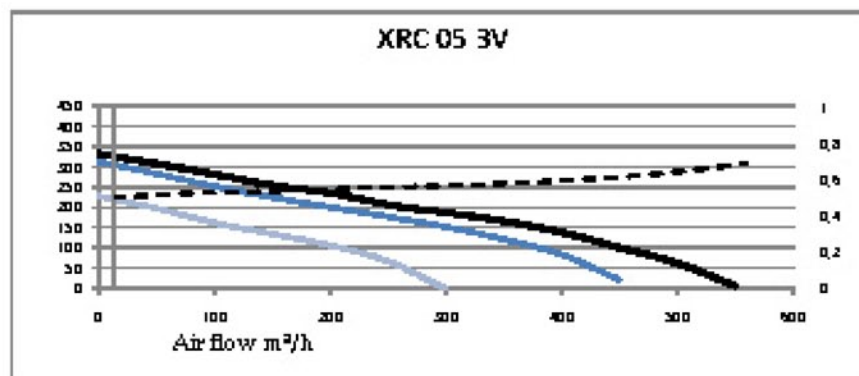
SELECTION CURVES MODEL 05



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.

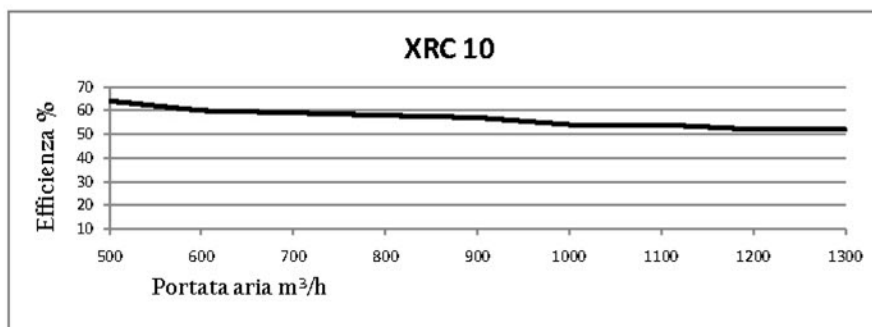




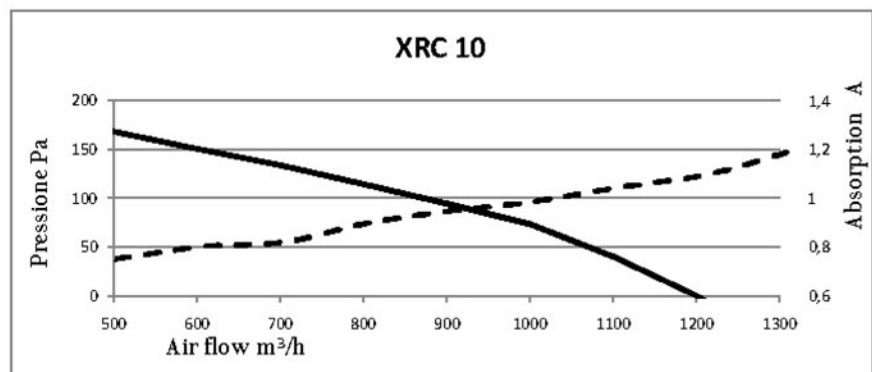
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES

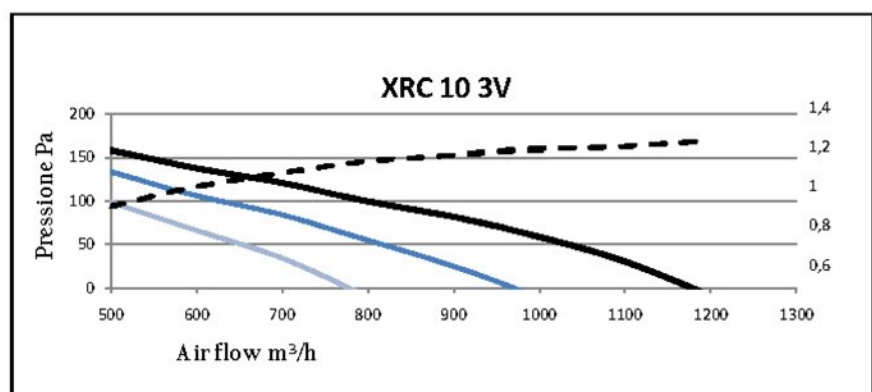
SELECTION CURVES MODEL 10



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.

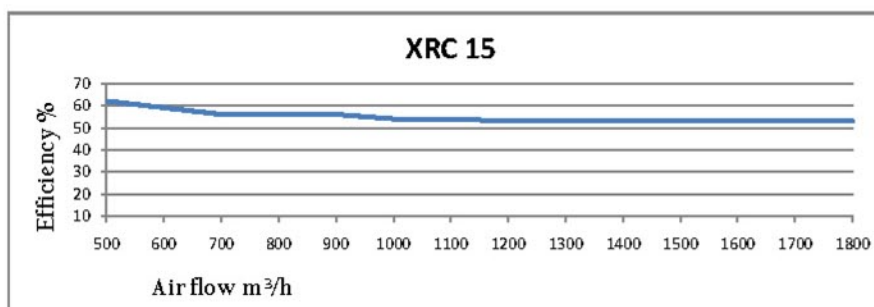




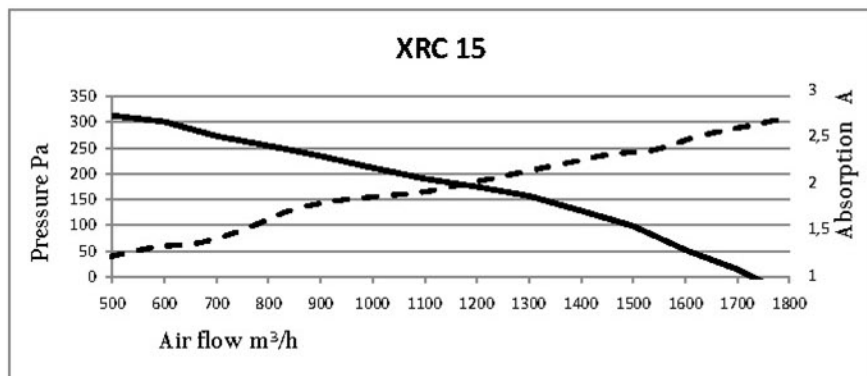
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES

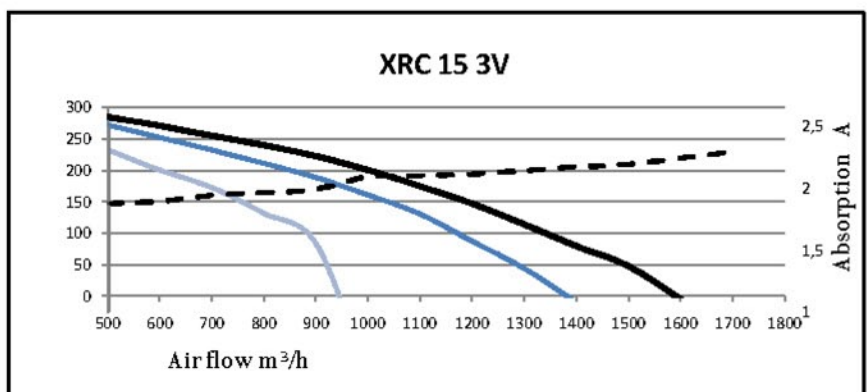
SELECTION CURVES MODEL 15



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.



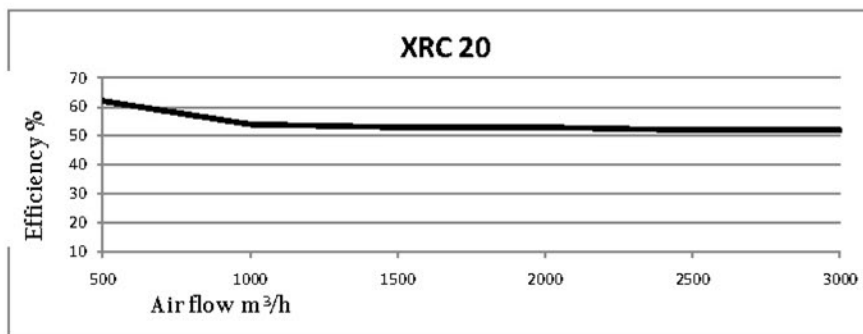
Three speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
When the speed decreases so does the pressure.
The dotted line in the diagram indicates the maximum power absorption for the correct dimensioning of the power supply system.



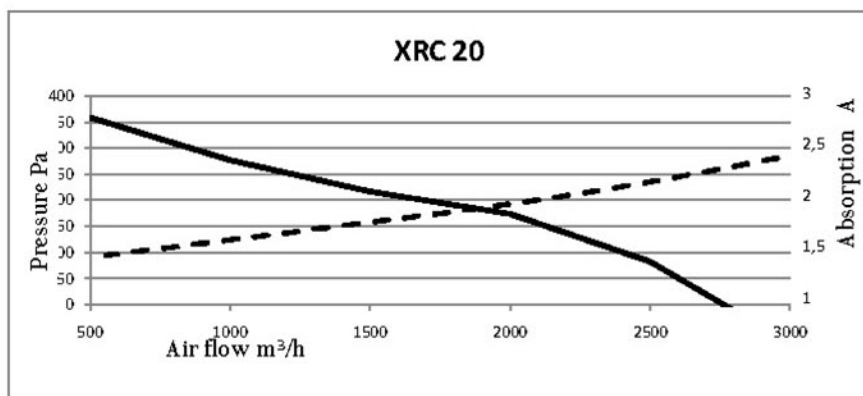
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES

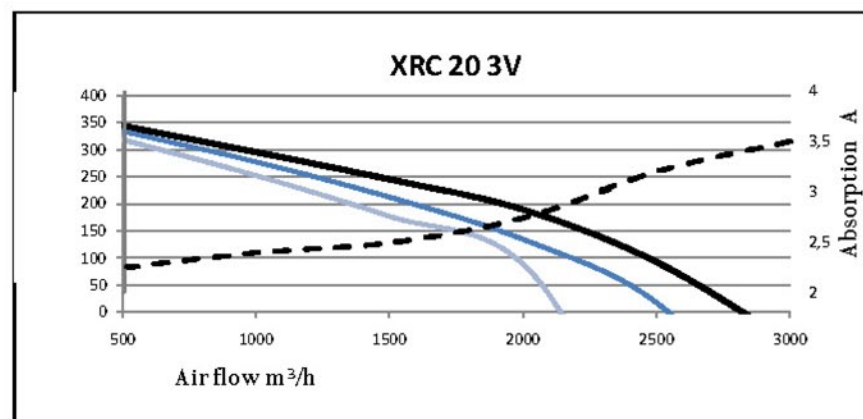
SELECTION CURVES MODEL 20



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.



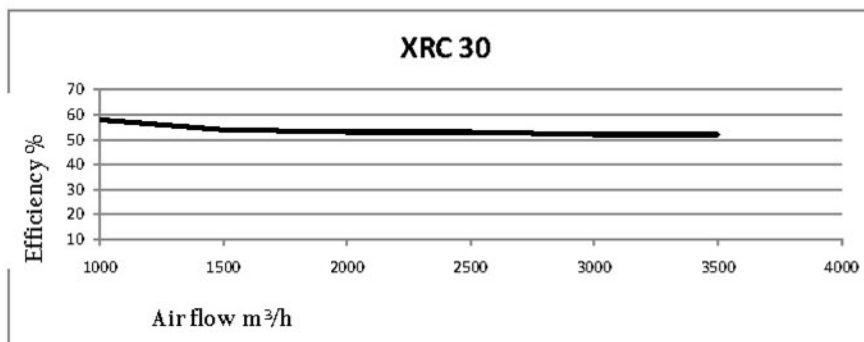
Three speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
When the speed decreases so does the pressure.
The dotted line in the diagram indicates the maximum power absorption for the correct dimensioning of the power supply system.



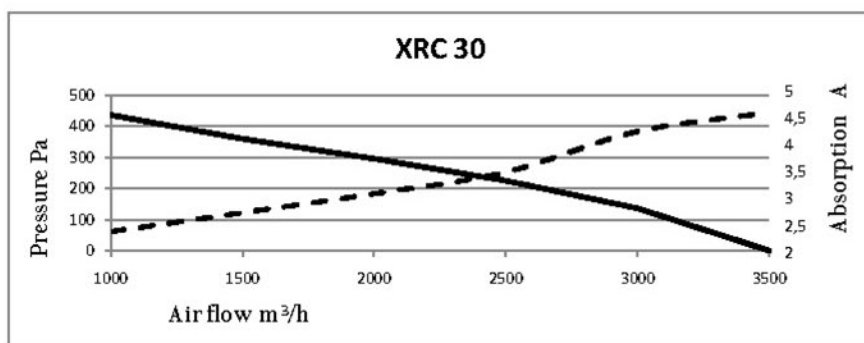
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES

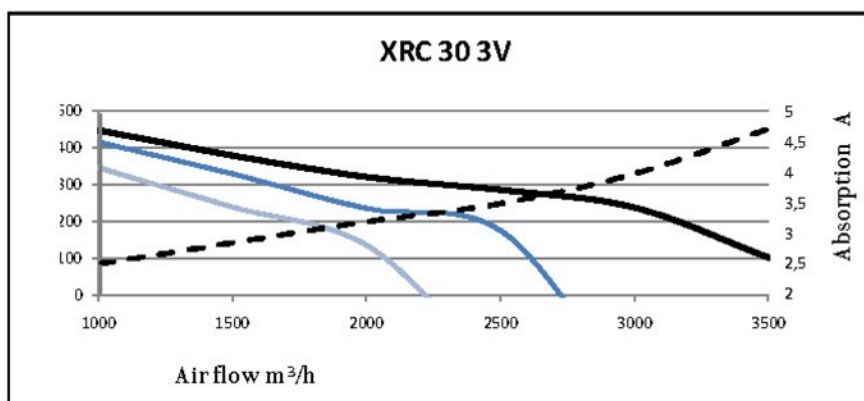
SELECTION CURVES MODEL 30



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.



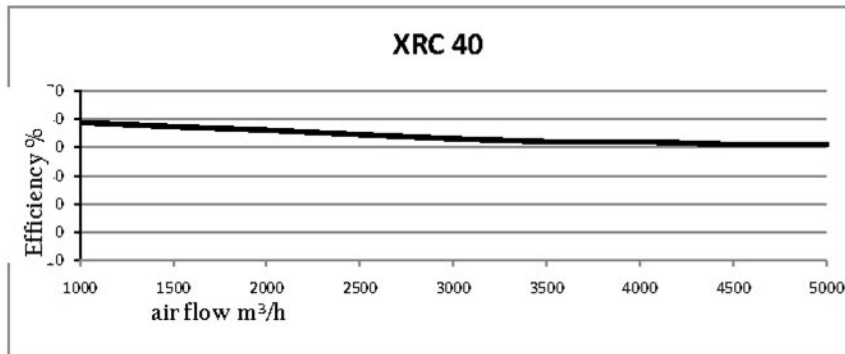
Three speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
When the speed decreases so does the pressure.
The dotted line in the diagram indicates the maximum power absorption for the correct dimensioning of the power supply system.



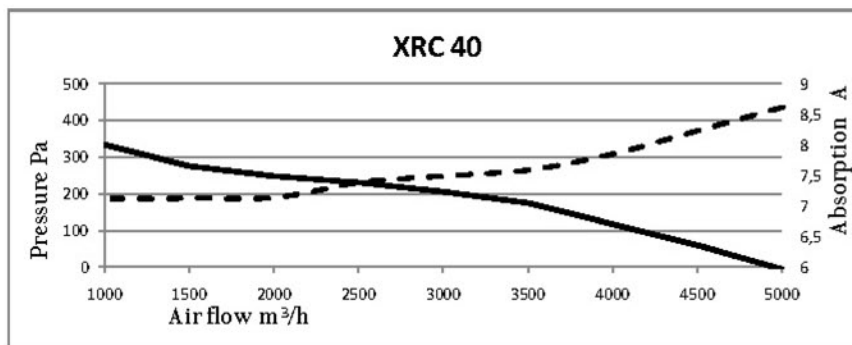
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES

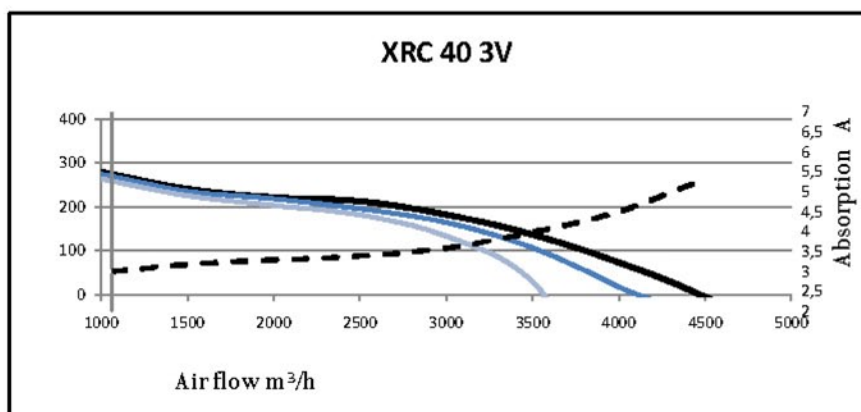
SELECTION CURVES MODEL 40



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.



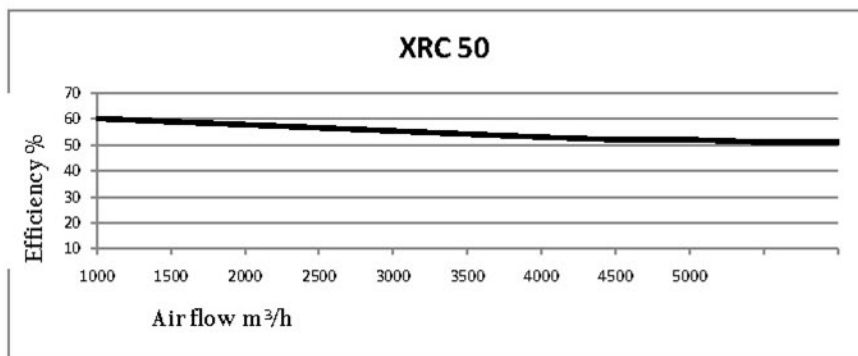
Three speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
When the speed decreases so does the pressure.
The dotted line in the diagram indicates the maximum power absorption for the correct dimensioning of the power supply system.



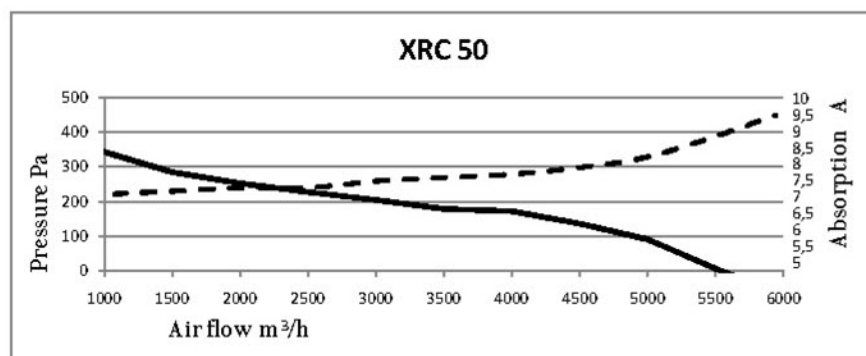
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES

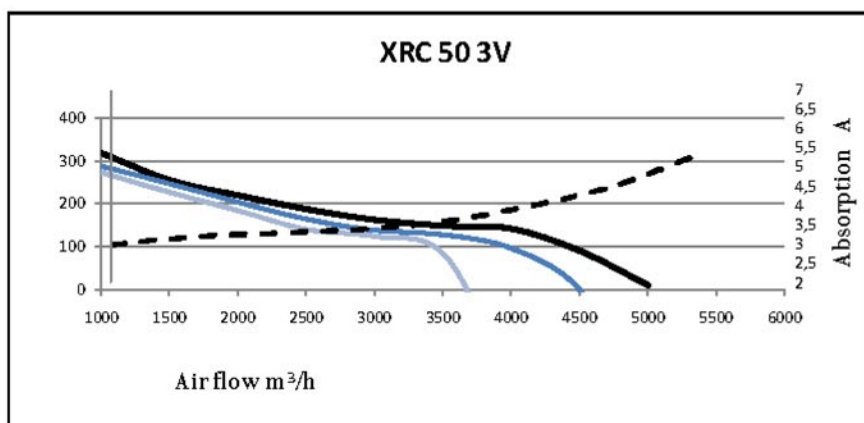
SELECTION CURVES MODEL 50



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Single speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.



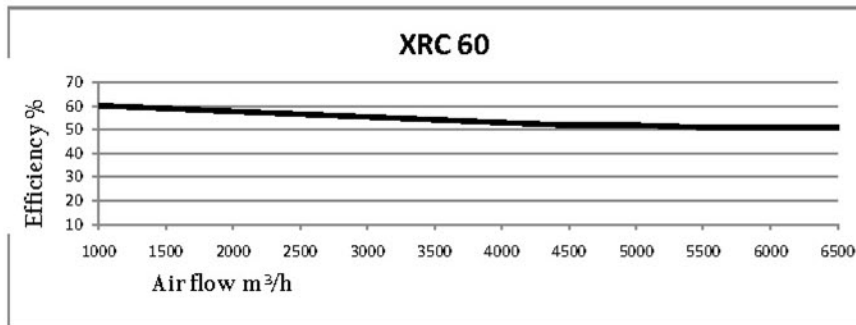
Three speed version.
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
When the speed decreases so does the pressure.
The dotted line in the diagram indicates the maximum power absorption for the correct dimensioning of the power supply system.



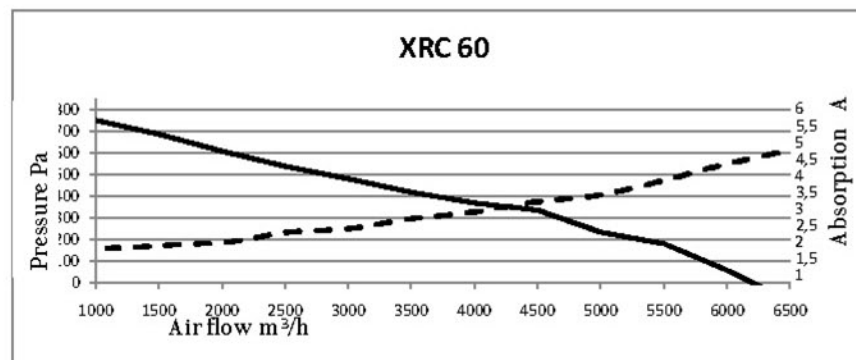
HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

XRC
SERIES

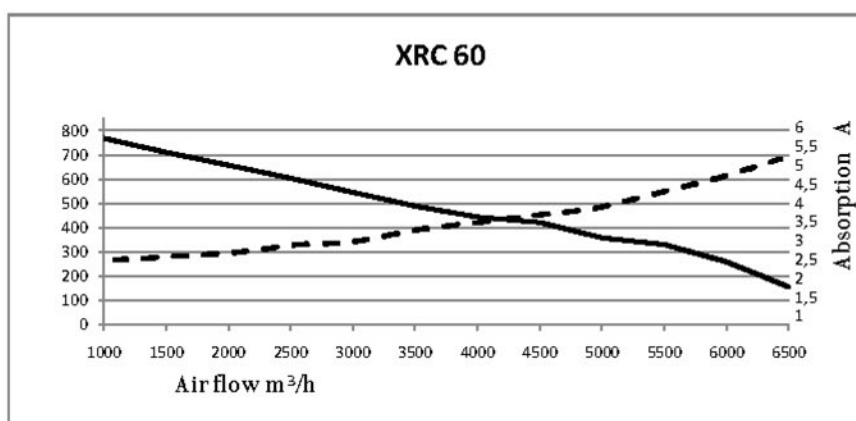
SELECTION CURVES MODEL 60



Thermal exchange efficiency.
By varying the air flow, it is possible to obtain different efficiency values for the thermal exchange.
The air flow can be adjusted both with regulating the dampers and by varying the revolutions of the motors.



Star connection - inferior speed
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
The dotted line on the diagram also indicates the power absorption for the correct size of the power supply system.



Triangular connection - superior speed
Available static pressure and power absorption.
By varying the air flow, it is possible to obtain different static pressure values for the injected air.
When the speed decreases so does the pressure.
The dotted line in the diagram indicates the maximum power absorption for the correct dimensioning of the power supply system.



HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW

COMPLETE REGULATION SYSTEM

XRC
SERIES

COMPLETE REGULATION SYSTEM :

The XRC series heat recuperators make use of an efficient system that can control two single phase motors at a variable speed, up to a maximum of three speeds. Alternatively two different power tri-phase motors allow a modular control of the temperature, both for three way valves and electric batteries.


CONSTRUCTION CHARACTERISTICS FOR STANDARD BASE MODEL:

The COMPACT command panel has a tin containment casing with a protection rating IP55 in PVC all in white. This is installed on the side of the unit. The control is done via a remote and/or infrared signal keypad. It is set up to manage the thermal regulation fixed point system, to control the anti freeze danger of the cooling and heating battery, to indicate when the filters need maintenance, for the presence of air flow and other external warnings like for example the general status of the set up.

The unit is delivered complete with power supply connection diagrams, instruction manual and conformity declarations. The testing for the control panel is done at the factory if installed by our technician or our technician can be present if installed by a third party.

The dimension of the control panel are 300x300x150mm and those for the control are 153x110x66mm.

REGULATION SYSTEMS

	MODEL	COMPACT base model 1 to 3 speeds	COMPACT base model 1 to 3 speeds with absorption above 10 A	COMPACT base model for tri phase motors with maximum power of 4 kW
	03	XRC-QC0		
	06	XRC-QC0		
	10	XRC-QC0		
	15	XRC-QC0		
	20	XRC-QC0		
	25	XRC-QC0		
	30	XRC-QC0		
	40		XRC-QC1	
	50		XRC-QC1	
	60			XRC-QC2

ADDITIONS FOR REGULATION SYSTEMS

MODEL	Addition of variable speed absorption with maximum of 6 Ampere	Addition of variable speed absorption with maximum of 10 Ampere	Addition of variable speed absorption with maximum of 20 Ampere	Addition of variable speed with inverter
03	XRC-QCAV06			
06	XRC-QCAV06			
10	XRC-QCAV06			
15		XRC-QCAV10		
20		XRC-QCAV10		
25		XRC-QCAV10		
30		XRC-QCAV10		
40			XRC-QCAV20	
50			XRC-QCAV20	
60				XRC-QCAVIN



HEAT RECUPERATORS WITH AIR-AIR CROSS FLOW







COMPLETE REGULATION SYSTEM

XRC
SERIES

ADDITIONS FOR REGULATION SYSTEMS

MODEL	Addition of control for 230 V electric battery with RSS max 5 kW	Addition of control for 400 V electric battery with RSS max 12 kW	Addition of air battery + antifreeze control	Addition of predisposition for Free Cooling or anti freeze damper control
03	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
06	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
10	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
15	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
20	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
25	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
30	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
40	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
50	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA
60	XRC-QCAB230	XRC-QCAB400	XRC-QCABACS	XRC-QCAPFC/XRC-QCAGSA

ACCESSORIES

	DESCRIPTION	CODE
	infrared remote control	XRC-QCTI
	Outdoor box for remote control	XRC-QCSE
	Incased box for remote control	XRC-QCSI
	Pair of pressure markers for blocked filters with pressure connections tubes.	XRC-QCPT
	Pair of lights with DO NOT SMOKE/SMOKING AREA sign	XRC-QCLS
	LCD display for remote control	XRC-QCDL



CLIMA UNO

Via Pier Luigi Nervi, 188/G/25 - 04100 Latina (Italy)

Phone: +39 0773 629191 - Fax: +39 0773 603388

Email: info@climauno.com - www.climauno.com