



### Description

UVC 90: Residential series heat recovery unit with polypropylene counter-flow exchanger, high efficiency > 90%

- execution with self-supporting structure in pre-painted sheet metal with rock wool insulation filling
- EC high efficiency fans
- temperature probes
- · integrated by-pass for free-cooling / free-heating
- F7 (ePM10 70%) filters on both supply and return
- control board on the machine
- integrated frost protection
- working temperature 0°C and 45°C with humidity < 80%</li>

#### Remote controls

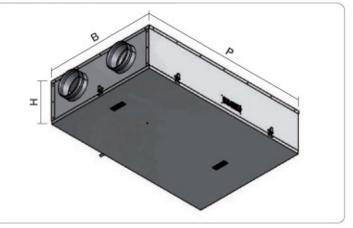
#### 3V EVO:

- on / off
- 3-speed selection
- · by-pass (opening/closing) alert with automatic control
- frost protect alert
- · dirty filters alert (with counter)
- · probe malfunction alert
- can be installed in type 503 horizontal box
- possibility of automatic control of antifreeze heater, including 2 stages
   possibility of controlling the unit with simple digital inputs (on-off and remote speeds)
- LCD (white):
- · LCD display
- integrated temperature / humidity probes
- · selectable fan speed control:
- 3 preset manual speeds (can be changed from 10% to 100%)
- automatic (depending on humidity or air quality or
- temperature or other external probes)
- diversify the speed of the inlet and expulsion fan
- · can be installed in type 503 horizontal box
- automatic by-pass control
- · frost protection with "pre-heating" coil management
- · post-heating battery management with 0-10 Volt signal
- · active alarms and alarm history
- clogged filter alarm
- · hourly / weekly programming
- possibility of controlling the unit with simple on-off inputs through the control board:
- on-off contacts (speed summer-winter)
- pairing with external probes 0-10 Volt
- ModBus on RS485
- pre-configuration for additional modules (Lan, RS485, RS232, GSM)

	Mod	lels
	100 m <sup>3</sup> /h	UVC 100** H-AC-LC
		UVC 150 H-LC ECO
on unit		UVC 150 H JOLLY
	450 50	UVC 150 H SLIM
	150 m <sup>3</sup> /h	UVC 150 HA
ilati		UVC 150 V
UVC residential ventilation unit		UVC 150 V COMPACT
		UVC 220 H
iden	200 m3/h	UVC 220 HA
UVC res		UVC 220 V
	000-10	UVC 350 H
	350 m <sup>3</sup> /h	UVC 350 V
	500 m1/h	UVC 500 H
	500 m³/h	UVC 500 V
	000 201-	UVC 800 H
÷	800 m <sup>3</sup> /h	UVC 800 V
1	4000	UVC 1200 H
latio	1200 m <sup>3</sup> /h	UVC 1200 V
enti	4000 30	UVC 1600 H
ial v	1600 m <sup>3</sup> /h	UVC 1600 V
/NR non-residential ventilation unit	0000	UVC 2200 H
	2200 m <sup>3</sup> /h	UVC 2200 V
	3000 m3/h	UVC 3200 HP
	3000 m-/n	UVC 3000 V
В	4000 m3/h	UVC 4000 V
	5000 m3/h	UNV 5000 V

\*: for class A, add humidistat or air quality probe \*\*: one speed

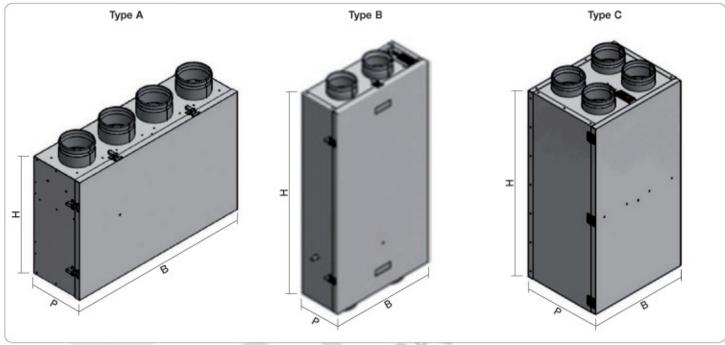
#### Dimensions - Horizontal version



UVC MODEL	B	H	Р	Ø	Kg	Watt	Amp.	Volt
100	410	207	804	125	24	52	0.23	230
150 H LC	490	207	804	125	29	100	0.80	230
150 JOLLY	487	250	854	125	33	100	0.80	230
150 SLIM	560	180	952	125	20	100	0.80	230
220 H	580	262	1000	160	42	173	1.50	230
350 H	720	275	1100	160	46	175	1.50	230
500 H	720	275	1100	200	49	332	2.70	230
800 H	1040	420	1300	250	100	380	2.90	230
1200 H	1230	420	1500	315	115	1000	4.40	230
1600 H	1200	700	1600	315	160	1000	4.40	230
2200 H	1070	690	1700	355	210	1500	6.60	230
3200 H	780	1250	1900	400	270	2000	3.30	400



### Dimensions - Vertical version



Туре	UVC Model	В	Р	Н	0	Kg	Watt	Amp.	Volt
В	150 HA	520	207	1000	125	37	100	0.8	230
A	150 V-SP*	770	226	500	125	20	100	0.8	230
C	150 V COMPACT	450	350	850	125	40	100	0.8	230
A	150 V	800	265	555	125	36	100	0.8	230
В	220 V HA	600	267	1000	160	47	173	1.5	230
A	220 V	900	270	800	160	53	173	1.5	230
A	350 V	900	410	900	160	75	176	1.5	230
Α	500 V	900	410	900	200	77	334	2.7	230
Α	800 V	1350	416	1100	250	95	380	2.9	230
Α	1200 V	1500	420	1200	315	110	1000	4.4	230
A	1600 V	1550	630	1400	315	170	1000	4.4	230
A	2200 V	1750	690	1400	355	220	1500	6.6	230

\*: prices on request

### Configurations

#### Horizontal installation



HS Standard

Ceiling



HB Support base

VB

Wall



Wall



"Type B" vertical installation

КВ

Support base



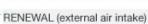
Heat recovery units / VMC / Air treatment

KP\* Wall

"Type A" vertical installation



VA Standard Wall \*: version with prices on request



RECOVERY (extraction from room)

HA Standard

Wall

4

Ceiling

KA\* Wall

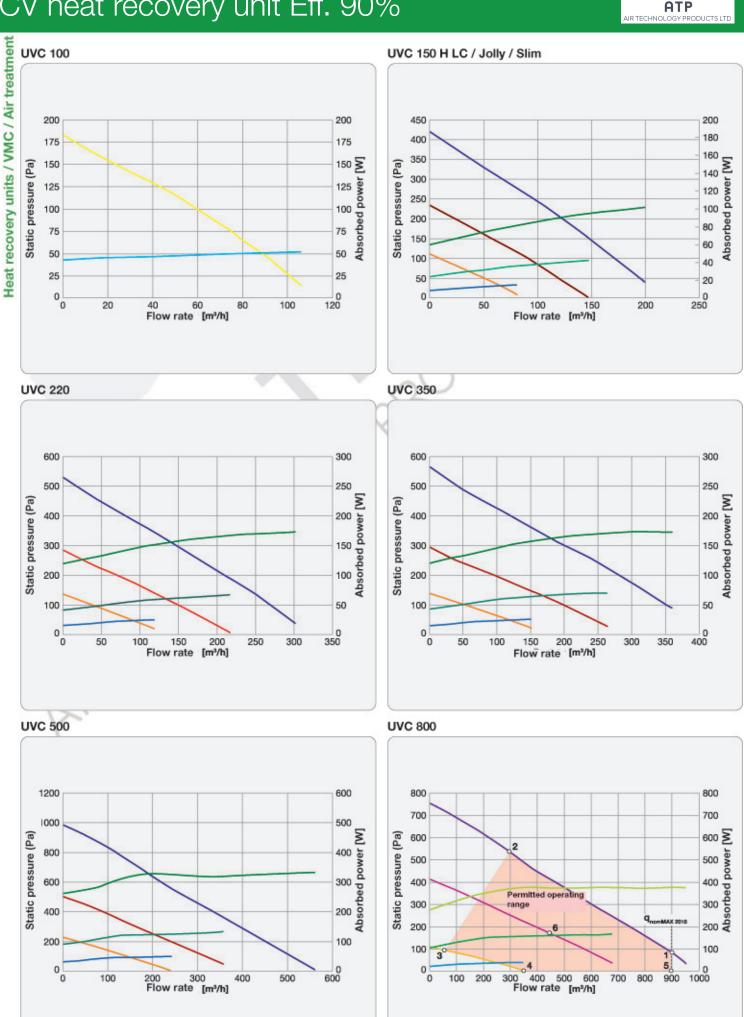


VM Standard Wall

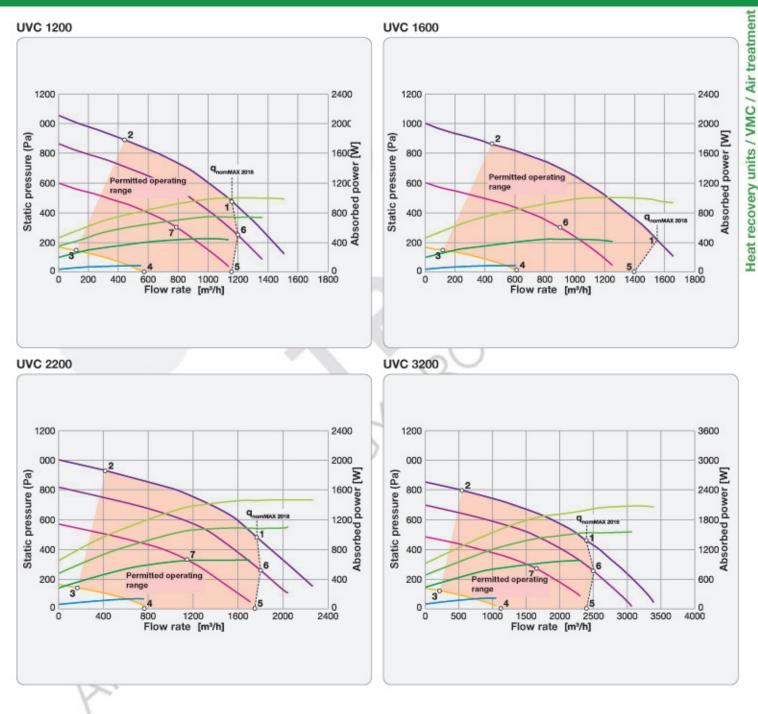


VN Wall

EXPULSION (expulsion to outside)









		Control compatibility			
Accessory	Unit pairing	4V board (S4) Potentiometer (Pt) 3 speeds (3V)	3 speeds EV0 (3E)	Electronics (SE), (EL), (EB) or (ET)	
Pressure switch 20-300 Pa	All the UVC 90	0	0	0	
(can be used for example as ventilation activation safety device)	All the REC D9 EC	supplied separately	supplied separately	supplied separately	
Pressure switch filters	All the UVC 90	standard supply	0	v	
(for both filters, order 2 pieces)	All the REC D9 EC	(1 mounted on renewal)	mounted, not connected	mounted, not connected	
	All the UVC 90	20	2		
Frost thermostat	All the REC D9 EC	v	X	x	
	All the UVC 90	0	0	0	
Room thermostat on-off	All the REC D9 EC	not managed	not managed	not managed	
	All the UVC 90				
Room temperature probe 0-10V	All the REC D9 EC	X	X	v	
	All the UVC 90				
Room temperature probe 0-10V with display	All the REC D9 EC	×	X	v	
	All the UVC 90				
Duct temperature probe 0-10V	All the REC D9 EC	×	X	v	
	All the UVC 90				
Room humidistat on-off		v	X 0 not managed X X X X X X V V X X X X X X X X X X X	v	
	All the REC D9 EC				
Duct humidistat on-off	All the UVC 90	v	v	v	
	All the REC D9 EC				
Humidity and room temperature probe 0-10V	All the UVC 90	x	X	v	
	All the REC D9 EC	3	· · · ·		
Humidity and room temperature probe 0-10V with display	All the UVC 90	x	X	v	
in the second second process of the second proces of the second pr	All the REC D9 EC		^		
Humidity and duct temperature probe 0-10V	All the UVC 90	x	x	v	
number and sold temperature proce of row	All the REC D9 EC	â	a 🔶 🕺	10	
Room air gualitu proba (CO2) 0, 10V	All the UVC 90	x	X	v	
Room air quality probe (CO2) 0-10V	All the REC D9 EC	^	<b>^</b>		
D	All the UVC 90		-		
Room air quality probe (VOC) 0-10V	All the REC D9 EC	x	×	v	
	All the UVC 90	5. 10 <sup>-1</sup>	2. 		
Room air quality probe (VOC) on-off	All the REC D9 EC	- V	v	v	
	All the UVC 90				
Room air quality probe (VOC) and humidity 0-10V	All the REC D9 EC	x	X	v	
	All the UVC 90	· ·			
Duct air quality probe (VOC) 0-10V	All the REC D9 EC	- X	×	v	
	All the UVC 90				
Duct air quality probe (VOC) and humidity 0-10V	All the REC D9 EC	x	X	v	
Additional ModBus module (add 1 RS458 port to use ModBus together with remote display)	All the UVC 90	x	X	v	
(and it mention point to use measures argument multitements anapitally)	All the REC D9 EC	-			
Constant pressure control 0-100 / 0-250 Pa (inlet only; order 2 pieces for both fans)	All the UVC 90	x	X	v	
(met only, order 2 pieces for both tans)	All the REC D9 EC				
Constant pressure control 0-500 / 0-1000 Pa	All the UVC 90	x	X	v	
(inlet only; order 2 pieces for both fans)	All the REC D9 EC		10	151	
Constant flow control 0-950 m <sup>2</sup> /h (80)	UVC 90 800	x	x	v	
(inlet only; order 2 pieces for both fans)	All the REC D9 EC	· ·			
Constant flow control 0-1900 m <sup>3</sup> /h (120 and 160)	UVC 90 1200-1600	x	x	v	
(inlet only; order 2 pieces for both fans)	REC D9 1200-1600	<u>^</u>	<u>^</u>		
Constant flow control (inlet only; order 2 pieces for both fans)	UVC 90 from 2200 and				
0-3500 m³/h (2200)	above				
0-4650 m³/h (3000 - 3200)		x	x	v	
0-5800 m <sup>3</sup> /h (4000)		1	<u>^</u>		
0-7400 m <sup>3</sup> /h (5000)	REC D9 from 2200 EC				
0-9000 m³/h (8000)	and above				



		Control compatibility			
Accessory	Unit pairing	4V board (S4)         3 speeds           Potentiometer (Pt)         EV0           3 speeds (3V)         (3E)		Electronics (SE), (EL), (EB) or (ET)	
	UVC 90 from 350 to2200				
P 55 control panel	(UVC 90 3200 standard supply)				
(Mandatory for external installations)	REC D9 EC from 500 to 2200	v	v	v	
	3000, 4000, 5000, 8000 standard supply				
Cover for outdoors for REC D9 800 horizontal (configuration from B1 to B8)	REC D9 800 EC (configuration from B1 to B8)				
Cover for outdoors for REC D9 800 vertical (configuration V1 or V5)	REC D9 800 EC (configuration V1 or V5)		121		
Cover for outdoors for REC D9 1200 horizontal (configuration from B1 to B8)	REC D9 1200 EC (configuration from B1 to B8)				
Cover for outdoors for REC D9 1200 vertical (configuration V1 or V5)	REC D9 1200 EC (configuration V1 or V5)		1.4		
Cover for outdoors for REC D9 1600 horizontal (configuration from B1 to B8)	REC D9 1600 EC (configuration from B1 to B8)		-		
Cover for outdoors for REC D9 1600 vertical (configuration V1 or V5)	REC D9 1600 EC (configuration V1 or V5)				
Cover for outdoors for REC D9 2200 horizontal (configuration from B1 to B8)	REC D9 2200 EC (configuration from B1 to B8)				
Cover for outdoors for REC D9 2200 vertical (configuration V1 or V5)	REC D9 2200 EC (configuration V1 or V5)		8.53		
Cover for outdoors for REC D9 3000 horizontal (configuration from B1 to B8)	REC D9 3000 EC (configuration from B1 to B8)				
Cover for outdoors for REC D9 3000 vertical (configuration V1 or V5)	REC D9 3000 EC (configuration V1 or V5)				
Cover for outdoors for REC D9 4000 horizontal (configuration from B1 to B8)	REC D9 4000 EC (configuration from B1 to B8)	5.50 S.50			
Cover for outdoors for REC D9 4000 vertical (configuration V1 or V5)	REC D9 4000 EC (configuration V1 or V5)		-		
Cover for outdoors for REC D9 5000 horizontal (configuration from B1 to B8)	REC D9 5000 EC (configuration from B1 to B8)				
Cover for outdoors for REC D9 5000 vertical (configuration V1 or V5)	REC D9 5000 EC (configuration V1 or V5)		020		
Cover for outdoors for REC D9 8000 vertical (configuration V1 or V5)	REC D9 8000 EC (configuration V1 or V5)		12		
Roof UVC 90 350 - 500 HB	UVC 90 350 - 500 HB		-		
Roof UVC 90 350 - 500 HP	UVC 90 350 - 500 HP		0-3		
Roof UVC 90 800 HB	UVC 90 800 HB				
Roof UVC 90 800 HP	UVC 90 800 HP		822		
Roof UVC 90 1200 HB	UVC 90 1200 HB				
Roof UVC 90 1200 HP	UVC 90 1200 HP		3.23		
Roof UVC 90 1600 HB	UVC 90 1600 HB		( <b>.</b>		
Roof UVC 90 1600 HP	UVC 90 1600 HP		100		
Roof UVC 90 2200 HB	UVC 90 2200 HB		(14)		
Roof UVC 90 2200 HP	UVC 90 2200 HP		1.5		
Roof UVC 90 3200 HP	UVC 90 3200 HP				

Accessory compatibility key: X= non compatible | O= partial compatibility (compatible with unit but not managed) | V= total compatibility

Heat recovery units / VMC / Air treatment



		Control compatibility			
Accessory	Unit pairing	4V board (S4) Potentiometer (Pt) 3 speeds (3V)	3 speeds EVO (3E)	Electronics (SE), (EL), (EB) or (ET)	
Electric heating element Ø125 0,5kW 230V 1F 1 stage (thermostat -30+30°C)	UVC 90 150	V managed with integrated thermostat	V managed with integrated thermostat	v	
Electric heating element Ø125 0,5kW 230V 1F (adjustment 0-10V)	UVC 90 150	X	x	v	
Electric heating element Ø160 0,75kW 230V 1F 1 stage (thermostat -30+30°C)	UVC 90 220	w managed with integrated thermostat	V managed with integrated thermostat	۷	
Electric heating element Ø160 0,75kW 230V 1F (adjustment 0-10V)	UVC 90 220	x	x	v	
Electric heating element Ø160 1kW 230V 1F 1 stage (thermostat -30+30°C)	UVC 90 350	V managed with integrated thermostat	V managed with integrated thermostat	۷	
Electric heating element Ø160 1kW 230V 1F (adjustment 0-10V)	UVC 90 350	x	x	v	
Electric heating element Ø200 1,5kW 230V 1F 1 stage (thermostat -30+30°C)	UVC 90 500	V managed with integrated thermostat	V managed with integrated thermostat	v	
Electric heating element Ø200 1,5kW 230V 1F (adjustment 0-10V)	UVC 90 500	X	X	v	
Electric heating element Ø250 2kW 230V 1F 2 stages	UVC 90 800	v	v		
(thermostat -30+30°C)	REC D9 800	managed with integrated thermostat	managed with integrated thermostat	v	
Electric heating element (/250 2kW 230V 1E	UVC 90 800				
ic heating element Ø250 2kW 230V 1F Iment 0-10V) ic heating element Ø315 3kW 400V 3F 2 stages Instat -30+30°C)	REC D9 800	x	x	v	
tric heating element (0315 3kW 400V 3F 2 stages	UVC 90 1200	v	V		
(thermostat -30+30°C)	REC D9 1200	managed with integrated thermostat	managed with integrated thermostat	v	
Electric heating element Ø315 3kW 400V 3F	UVC 90 1200				
(adjustment 0-10V)	REC D9 1200	x	x	v	
Electric heating element Ø315 4kW 400V 3F 2 stages	UVC 90 1600	v	٧		
(thermostat -30+30°C)	REC D9 1600	managed with integrated thermostat	managed with integrated thermostat	v	
Electric heating element Ø315 4kW 400V 3F	UVC 90 1600				
(adjustment 0-10V)	REC D9 1600	x	x	v	
Electric heating element Ø355 6kW 400V 3F 2 stages	UVC 90 2200	v	٧		
(thermostat -30+30°C)	REC D9 2200	managed with integrated thermostat	managed with integrated thermostat	v	
Electric heating element Ø355 6kW 400V 3F	UVC 90 2200		4		
(adjustment 0-10V)	REC D9 2200	x	x	v	
Electric heating element Ø400 12kW 400V 3F 2 stages	UVC 90 3200	v	v	1.00	
(thermostat -30+30°C)	REC D9 3000	managed with integrated thermostat	managed with integrated thermostat	v	
Electric heating element Ø400 12kW 400V 3F	UVC 90 3200		~		
(adjustment 0-10V)	REC D9 3000	x	x	v	
Electric heating element Ø400 16kW 400V 3F 2 stages (thermostat -30+30°C)	REC D9 4000	V managed with integrated thermostat	V managed with integrated thermostat	v	
Electric heating element Ø400 16kW 400V 3F (adjustment 0-10V)	REC D9 4000	x	x	v	
Electric heating element Ø450 16kW 400V 3F 2 stages (thermostat -30+30°C)	REC D9 5000	V managed with integrated thermostat	V managed with integrated thermostat	v	
Electric heating element Ø450 16kW 400V 3F	REC D9 5000	x	x	v	



			Control compatibility	
Accessory	Unit pairing	Unit pairing 4V board (S4) Potentiometer (Pt) 3 speeds (3V)	3 speeds EV0 (3E)	Electronics (SE), (EL), (EB) or (ET)
Hot//cold water coil 150 m <sup>2</sup> /h and 1kW (1/2" connections)	UVC 90 150	0 not managed	0 not managed	۷
Hot//cold water coil 220 m³/h and 1.6kW (1/2" connections)	UVC 90 220	0 not managed	0 not managed	۷
Hot//cold water coil 350 m³/h and 2.2kW (1/2" connections)	UVC 90 350	0 not managed	0 not managed	۷
Hot//cold water coil 500 m³/h and 3.2kW (1/2" connections)	UVC 90 500	0 not managed	0 not managed	۷
Hot//cold water coil 800 m <sup>3</sup> /h and 5.7kW	UVC 90 800	0	0 not managed	V
/2" connections)	REC D9 800	not managed		
Hot//cold water coil 1200 m <sup>3</sup> /h and 7.8kW	UVC 90 1200	0 not managed	0 not managed	۷
(3/4" connections)	REC D9 1200			
Hot//cold water coil 1600 m <sup>3</sup> /h and 9.7kW	UVC 90 1600	0	0 not managed	۷
(3/4" connections)	REC D9 1600	not managed		
Hot//cold water coil 2200 m <sup>3</sup> /h and 15kW	UVC 90 2200	0	0 not managed	۷
(3/4" connections)	REC D9 2200	not managed		
Hot//cold water coil 3200 m³/h and 22kW	UVC 90 3200	0	0	
(1" connection)	REC D9 3000	not managed	not managed	
Hot//cold water coil 4000 m <sup>s</sup> /h and 29kW (1" connection)	REC D 9 4000	0 not managed	0 not managed	۷
Hot//cold water coil 5000 m <sup>s</sup> /h and 31kW (1" connection)	REC D 9 5000	0 not managed	0 not managed	۷

			Control compatibility	
Accessory	Unit pairing	4V board (S4) Potentiometer (Pt) 3 speeds (3V)	3 speeds EV0 (3E)	Electronics (SE), (EL), (EB) or (ET)
2-way servovalve on-off (230V), 1/2* connections	All UVC 90 and REC D9 based on connection Ø	0 not managed	0 not managed	v
3-way servovalve on-off (230V), 1/2* connections	All UVC 90 and REC D9 based on connection Ø	0 not managed	0 not managed	۷
2-way servovalve on-off (230V), 3/4* connections	All UVC 90 and REC D9 based on connection Ø	0 not managed	0 not managed	v
3-way servovalve on-off (230V), 3/4* connections	All UVC 90 and REC D9 based on connection Ø	0 not managed	0 not managed	۷
2-way servovalve on-off (230V), 1" connections	All UVC 90 and REC D9 based on connection Ø	0 not managed	0 not managed	۷
3-way servovalve on-off (230V), 1" connections	All UVC 90 and REC D9 based on connection Ø	0 not managed	0 not managed	۷
2-way servovalve 0-10V (24V), 1/2" connections	All UVC 90 and REC D9 based on connection Ø	X	x	٧
3-way servovalve 0-10V (24V), 1/2" connections	All UVC 90 and REC D9 based on connection Ø	X	x	٧
2-way servovalve 0-10V (24V), 3/4" connections	All UVC 90 and REC D9 based on connection Ø	X	x	۷
3-way servovalve 0-10V (24V), 3/4" connections	All UVC 90 and REC D9 based on connection Ø	x	x	۷
2-way servovalve 0-10V (24V), 1" connections	All UVC 90 and REC D9 based on connection Ø	x	x	۷
3-way servovalve 0-10V (24V), 1" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v

Heat recovery units / VMC / Air treatment



		Control compatibility			
Accessory	Unit pairing	4V board (S4) Potentiometer (Pt) 3 speeds (3V)	3 speeds EVO (3E)	Electronics (SE), (EL), (EB) or (ET)	
2-way ball servovalve 0-10V (24V), 1/2" connections	All UVC 90 and REC D9 based on connection Ø	X	x	v	
3-way ball servovalve 0-10V (24V), 1/2" connections	All UVC 90 and REC D9 based on connection Ø	X	x	v	
2-way ball servovalve 0-10V (24V), 3/4" connections	All UVC 90 and REC D9 based on connection Ø	X	x	v	
3-way ball servovalve 0-10V (24V), 3/4" connections	All UVC 90 and REC D9 based on connection Ø	X	x	v	
2-way servovalve 0-10V (24V), 1" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way servovalve 0-10V (24V), 1" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way ball servovalve 0-10V (24V), 1 1/4" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way ball servovalve 0-10V (24V), 1 1/4" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way ball servovalve 0-10V (24V), 1 1/2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way ball servovalve 0-10V (24V), 1 1/2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way servovalve 0-10V (24V), 2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way servovalve 0-10V (24V), 2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way ball servovalve 0-10V (230V), 1/2" connections	All UVC 90 and REC D9 based on connection Ø	X	x	v	
3-way ball servovalve 0-10V (230V), 1/2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way ball servovalve 0-10V (230V), 3/4" connections	All UVC 90 and REC D9 based on connection Ø	X	x	v	
3-way ball servovalve 0-10V (230V), 3/4" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way servovalve 0-10V (230V), 1" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way servovalve 0-10V (230V), 1" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way ball servovalve 0-10V (230V), 1 1/4" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way ball servovalve 0-10V (230V), 1 1/4" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way ball servovalve 0-10V (230V), 1 1/2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way ball servovalve 0-10V (230V), 1 1/2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
2-way servovalve 0-10V (230V), 2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	
3-way servovalve 0-10V (230V), 2" connections	All UVC 90 and REC D9 based on connection Ø	x	x	v	