







# **ERV** range

ENERGY RECOVERY VENTILATION



#### **ERV SYSTEMS OFFER THREE IMPORTANT BENEFITS:**

- Improved indoor air quality: With a steady stream of conditioned fresh air coming indoors, you don't have to open doors and windows to ventilate your indoor spaces. The amount of particulates in your indoor air is reduced by this improved ventilation by using proper filtration unit.
- 2. **Better indoor moisture control:** Energy recovery ventilators transfer moisture from humid outdoor air to the exhaust stream of air leaving your house. This helps prevent humidity and moisture buildup throughout your home.
- Financially: This equipment can easily tie into the HVAC system of a home, this reduces utility expenses and dramatically reduces the waste of energy for which you've already paid.



#### **Effective Ventilation**

Introduces outdoor fresh air into indoors, meanwhile expels the indoor stale air to outdoor, which makes you feel the comfort of nature.



#### High efficient energy recovery

The built-in high efficient heat exchanger can recover the energy from outgoing indoor air to coming fresh air while ventilating. It can recover over 70% energy.



#### Perfect silence design

It is designed with the worldwide fashionable structure and manufactured by the accurate moldings. According to the principle of hydrokinetics, it achieves the perfect silent effect by using the micro-punch anechoic technology.



#### Air filtration and purification

The inner air filters are professionally designed to remove the pollutants of the incoming air, providing you the fresh and clean air.



#### **By-pass function**

By-pass function enables the unit to make natural ventilation in suitable climates, which can prolong the service life of the heat exchanger.



# High airproof feature and easy maintenance

The heat exchanger is connected with the equipment by the in-mold rail, and embedded with the special soft and dense sealing materials. It can be drew out by hand and is easy to maintain. At the same time, it can ensure that the fresh air and exhaust air are completely separated, avoiding the cross pollution.



#### **SELECTION GUIDE**

ERVs are available in wall mount or duct-connected models. This discussion will focus on duct connected models which can be used for ventilating an entire house.

#### 1.0 Best Applications for an ERV

The house is very tight -0.5 air changes per hour (ACH) or less.Heating and/or cooking equipment and/or the attached garage are not adequately vented.

Household chemicals are stored in the house.

Radon levels are high. (If radon levels are higher than 15 pCi/liter [picoCuries per liter], an ERV will not be adequate to remedy the situation. Four picoCuries per liter is the level at which the EPA recommends that remedial action take place.) In the Austin region, radon is generally not considered a problem.

Formaldehyde levels are high.

The home becomes depressurized as a result of leaks in the home's mechanical system. This is a common problem.

#### 2.0 Types of Heat Exchanger Cores

Cross flow plate coresCounter flow flat-plate cores

Heat pipe core

Rotary wheel core. (These exchangers offer the best advantages for homes with air conditioning as they can regulate humidity with a rotary wheel core plus a desiccant wheel.)

#### 3.0 Efficiency

The efficiency of ERVs refers to the amount of temperature adjustment of the incoming fresh air that the outgoing stale air can accomplish in the heat exchanger.In the winter, the outgoing heated stale air will pre-heat the incoming fresh air to some extent, according to the unit's efficiency. The opposite occurs in the summer with the outgoing air pre-cooling the incoming air.

- Choose the proper installation types based on the building structure
- Determine the fresh airflow required according to the use, size and number of persons
- Select the right specifications and quantity according to the determined fresh airflow

A unit with humidity regulation will remove humidity from humid summer fresh air and add humidity to the incoming dry winter air.

The Home Ventilating Institute (HVI) has a standard test for units manufactured in the United States. Not all manufacturers have been tested, so it is necessary to examine efficiency claims to see if they are HVI data or manufacturers data to get a true comparison. All units sold in Canada are subject to a standard test (R-2000), which is almost identical to HVI's test.

#### 4.0 Installation

These units are typically installed in an attic, crawlspace, or storage/utility area. They require two connections to the outdoors – one to exhaust the stale indoor air and the other to bring in the fresh outside air. The inlet and outlet on the building exterior need to be distanced from each other to avoid cross contamination. It is preferred to have the inlet and outlet on different sides of the house.

Fresh air from the unit into the home's interior can be supplied in two ways. A separate supply duct can carry the fresh air to a central location in the house. This supply outlet is best located where the air will not blow on people, since the air can be too cool or too warm depending on the season. The fresh air can also be placed into the existing ductwork, typically, in the return duct.

The stale air from a home is typically drawn from the most humid locations – bathroom(s) and kitchen. An ERV works with bathroom exhaust fans by continually drawing air from the bathroom. When the bathroom is in use, the exhaust fan boosts the exiting of humid air into the same duct used by the ERV. However, an ERV should not share the same exhaust duct as a range hood.

#### **AIRFLOW REQUIRED IN RESIDENTIAL BUILDINGS**

Rooms type			Non-smol	king		Slight sr	noking	Heavy Smoking
nooms type	Ordinary ward	Gym	Theater & mall	Office	Computer room	Dining room	VIP	Meeting room
Personal fresh air consumption(m3/h) (Q)	17-42	8-20	8.5-21	25-62	40-100	20-50	30-75	50-125
Air changes per hour (P)	1.06-2.65	0.50-1.25	1.06-2.66	1.56-3.90	2.50-6.25	1.25-3.13	1.88-4.69	3.13-7.81



#### **EXAMPLE**

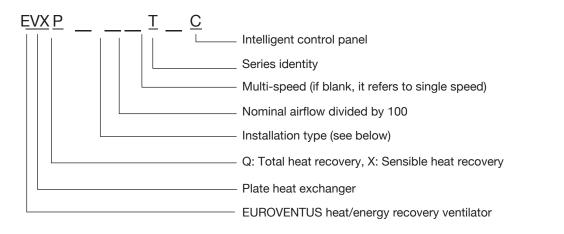
The area of a computer room is 60 sq. meters (S=60), the net height is 3 meters (H=3), and there are 10 persons (N=10) in it

If it is calculated according to "Personal fresh air consumption", and assume that: Q=70, the result is Q1 =N\*Q=10\*70=700(m3/h)

If it is calculated according to "Air changes per hour", and assume that: P=5, the result is Q2 =P\*S\*H=5\*60\*3=900(m3) Since Q2 > Q1 , Q2 is better for selecting the unit.

As to special industry such as hospitals (surgery and the special nursing rooms), labs, workshops, airflow required should be determined in conformity with regulations concerned.

#### **MODEL DESCRIPTION**



#### **INSTALLATION TYPE**

D-Suspended type, L-Floor type, W-Wall type (external or balcony), G-Wall type (internal or balcony)

#### **EXAMPLE**

EVXPQ-D10TLE refers to suspended type ERV with total heat exchanger, TLE series, airflow of 1000m3/h, 3 speeds.



## **LE SERIES, SUSPENDED TYPE**



EVXPQ-D1.5LE~D10TLE



EVXPQ-D15LE~D20TLE

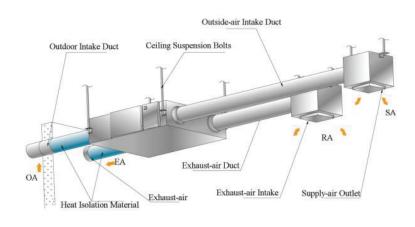
#### **FEATURES**

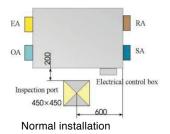
- Airflow from 115-2000m3/h
- Energy recovery
- High efficient counter flow heat exchanger
- 3 speeds
- Quiet operation
- Double filters
- Easy installation to ceiling
- By-pass function

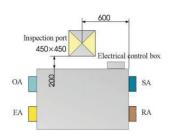
#### **APPLICATION**

Suitable for household, meeting room, office, computer room, dining (carbon filter is optional) and gym places etc.

#### **INSTALLATION**







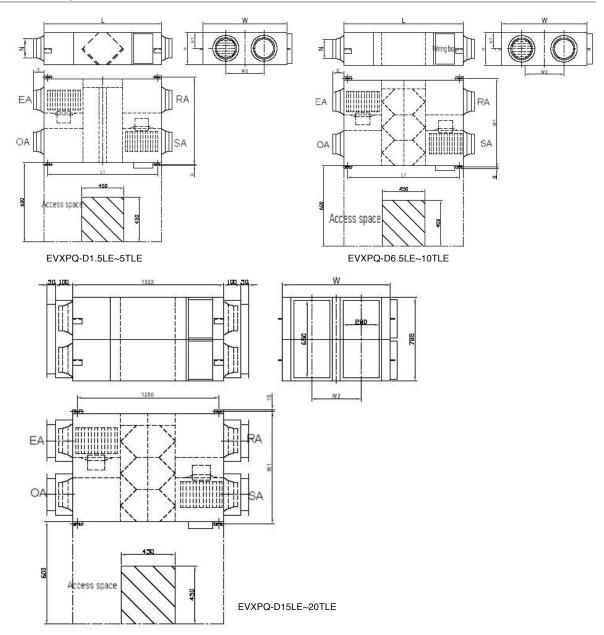
Inverted installation

#### **SPECIFICATIONS**

	Airflo	и ( m <sup>3</sup> /	/h <sup>3</sup> )	Exte		ressure	E	Entha	lpy Eff	icien	су (%	)	Ten	np. Eff	. (%)		Noise		Volt.	Current	Input	IIV. VV. I
Model					(Pa)		5	Summ	ner	,	Winte	r					ub(A)		V)	A)	power W)	Kg)
	L	М	Н	L	М	Η	L	М	Η	L	М	Н	L	М	Н	L	М	Η			VV)	
EVXPQ-D1.5TLE	115	150	150	34	58	75	67	63	63	74	70	70	77	75	75	22	24	26	220	0.5	105	25
EVXPQ-D2.5TLE	165	250	250	30	70	85	67	63	63	73	70	70	77	75	75	22	26	27	220	0.56	117	29
EVXPQ-D3.5TLE	270	350	350	36	60	90	67	66	66	72	69	69	77	75	75	25	29	31	220	0.72	150	37
EVXPQ-D5TLE	360	500	500	30	60	100	68	62	62	72	67	67	78	75	75	25	31	33	220	0.96	200	43
EVXPQ-D6.5TLE	515	650	650	25	40	70	64	65	62	70	68	68	77	75	75	30	34	35	220	1.4	295	64
EVXPQ-D8TLE	625	800	800	60	98	120	68	65	65	74	71	71	77	75	75	32	36	38	220	1.7	355	71
EVXPQ-D10TLE	780	1000	1000	25	35	85	68	65	65	74	71	71	77	75	75	31	36	38	220	2.1	440	83
EVXPQ-D15TLE	1250	1500	1500	20	45	75	68	65	65	74	71	71	77	75	75	31	39	41	220	3.4	710	165
EVXPQ-D20TLE	1700	2000	2000	20	25	60	68	65	65	74	71	71	77	75	75	34	39	41	220	4.2	880	189



## **LE SERIES, SUSPENDED TYPE**

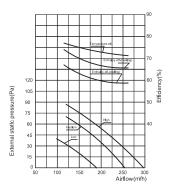


Model	L	L1	W	W1	W2	Н	H1	С	G	N
EVXP Q-D1.5TLE	808	867	580	510	290	264	20	100	19	Ф144
EVXP Q-D2.5TLE	882	810	599	657	315	270	111	100	19	Ф144
EVXP Q-D3.5TLE	882	810	804	860	480	270	111	100	19	Ф144
EVXP Q-D5TLE	962	890	904	960	500	270	111	107	19	Ф194
EVXP Q-D6.5TLE	1222	1150	884	940	480	340	146	107	19	Ф194
EVXP Q-D8TLE	1322	1250	884	940	428	388	170	85	19	Ф242
EVXP Q-D10TLE	1322	1250	1134	1190	678	388	170	85	19	Ф242
EVXP Q-D15TLE	1322	1250	884	940	428	785	-	-	-	-
EVXP Q-D20TLE	1322	1250	1134	1190	678	785	-	-	-	-

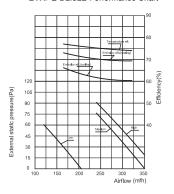




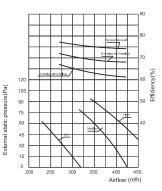
EVXPQ-D1.5LE Performance Chart



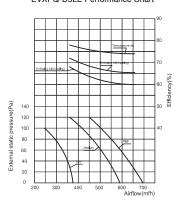
EVXPQ-D2.5LE Performance Chart



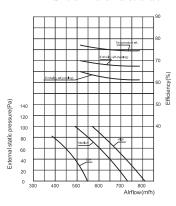
EVXPQ-D3.5LE Performance Chart



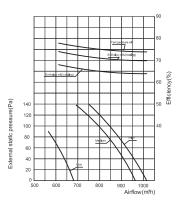
EVXPQ-D5LE Performance Chart



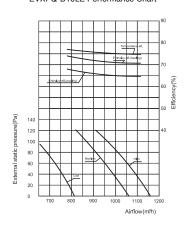
EVXPQ-D6.5LE Performance Chart



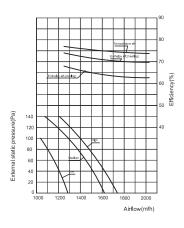
EVXPQ-D8LE Performance Chart



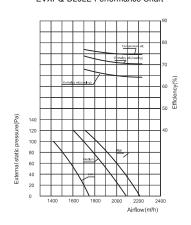
EVXPQ-D10LE Performance Chart



EVXPQ-D15LE Performance Chart



EVXPQ-D20LE Performance Chart





## HE SERIES, SUSPENDED TYPE

#### **FEATURES**

- Airflow from 150-1300m3/h
- Heat or energy recovery
   Quiet operation
   Double filters

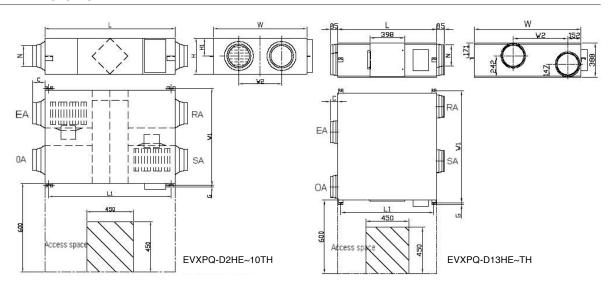
- Easy installation to ceilingBy-pass function



EVXPQ-D2HE~D13HE

#### **SPECIFICATIONS**

	Airflox	v 2 m	2/h2		Extern		E	Enthal	py Ef	ficien	cy (9	6)	Tom	np. Eff.	(%)		Noise				Input	
Model	All IIO	/V Z 111s	3/113	р	ressu (Pa)		9	Summ	er	,	Winte	r	ווו	ip. Eii.	(70)		ivoise		Volt. V)	Current A)	power	N. W. Kg)
	L	М	Η	L	М	Η	L	М	Η	L	М	Τ	L	М	Η	L	М	Η	,	,	W)	
EVXP Q-D2HE	150	200	200	60	70	75	60	55	55	63	59	59	75	70	70	22	25	27	220	0.5	105	23
EVXP Q-D3HE	250	300	300	75	82	85	62	57	57	65	61	61	73	68	68	23	27	30	220	0.56	117	25
EVXP Q-D4HE	350	400	400	80	85	88	62	57	57	65	60	60	74	69	69	25	29	32	220	0.72	150	31
EVXP Q-D6HE	500	600	600	89	92	97	63	59	59	67	61	61	76	70	70	25	31	35	220	0.96	200	36
EVXP Q-D8HE	700	800	800	92	96	100	57	55	55	63	57	57	74	68	68	32	37	39	220	1.7	355	60
EVXP Q-D10HE	900	1000	1000	80	85	86	60	58	58	64	62	62	76	70	70	32	36	40	220	2.1	440	70
EVXP Q-D13HE	1000	1300	1300	75	85	90	58	56	56	62	59	59	76	70	70	37	40	42	220	3.4	710	79



Model	L	L1	W	W1	W2	Н	H1	С	G	N
EVXPQ-D2HE	666	725	580	510	290	264	20	100	19	Ф144
EVXPQ-D3HE	744	675	599	657	315	270	111	100	19	Ф144
EVXPQ-D4HE	744	675	804	860	480	270	111	100	19	Ф144
EVXPQ-D6HE	824	754	904	960	500	270	111	107	19	Ф194
EVXPQ-D8HE	1116	1045	884	940	428	388	170	85	19	Ф242
EVXPQ-D10HE	1116	1045	1134	1190	678	388	170	85	19	Ф242
EVXPQ-D13HE	1129	1059	1216	1273	621	388		85	19	Ф242



## FNH SERIES, WITH HIGH EFFICIENT FILTER

#### **FEATURES**

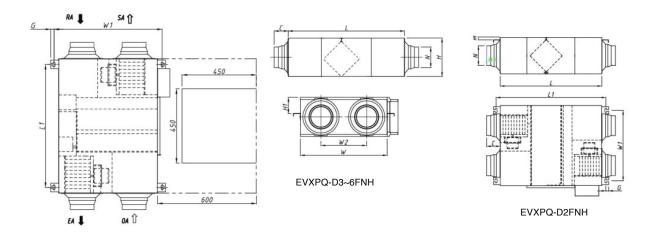
- Airflow from 150-600m3/h
   Heat or energy recovery
   Integrated with high efficient filters, made of operating theatre clean class material
- Filtration class up to F9
- Easy installation and maintenanceBy-pass function



#### EVXPQ-D2PFNH~D6PFNH

#### **SPECIFICATIONS**

	۸:سوار	(m2	/h2\		xtern			Enthal	py Eff	icienc	y (%	5)	Т	- F#	(0/)		Noise				Input	
Model	AITIC	ow (m3	/n3)	р	ressu (Pa)	re	5	Summ	er	,	Winte	r	rem	ıp. Eff.	(%)		dB(A)		Volt. (V)	Current (A)	power	N. W. ( Kg)
	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	. ,	. ,	(W)	
EVXPQ-D2FNH	150	200	200	50	60	65	60	55	55	63	59	59	75	70	70	25	30	31.5	220	0.45	95	24.5
EVXPQ-D3FNH	250	300	300	65	72	75	62	57	57	65	61	61	73	68	68	27	34	34.5	220	0.53	110	26.5
EVXPQ-D4FNH	350	400	400	70	75	78	62	57	57	65	60	60	74	69	69	31	37	37.5	220	0.65	145	33
EVXPQ-D6FNH	500	600	600	79	82	87	63	59	59	67	61	61	76	70	70	29	35	39	220	0.92	195	38
EVXPQ-D8FNH	700	800	800	82	86	90	57	55	55	63	57	57	74	68	68	34	39	41	220	1.7	355	62
EVXPQ-D10FNH	900	1000	1000	70	75	76	60	58	58	64	62	62	76	70	70	34	38	42	220	2.1	440	72
EVXPQ-D13FNH	1000	1300	1300	65	75	80	58	56	56	62	59	59	76	70	70	38	41	43	220	3.4	710	81



Model	L	L1	W	W1	W2	Н	H1	С	G	N
EVXPQ-D2FNH	736	795	580	510	290	264	20	100	20.5	Ф144
EVXPQ-D3FNH	814	745	599	657	315	270	111	100	20.5	Ф144
EVXPQ-D4FNH	814	745	804	860	480	270	111	100	20.5	Ф144
EVXPQ-D6FNH	894	824	904	960	500	270	111	107	20.5	Ф194
EVXPQ-D8FNH	1186	1115	884	940	428	388	170	85	19	Φ 242
EVXPQ-D10FNH	1186	1115	1134	1190	678	388	170	85	19	Φ 242
EVXPQ-D13FNH	1199	1129	1216	1273	321	388	-	85	19	Φ 242

#### **FEATURES**

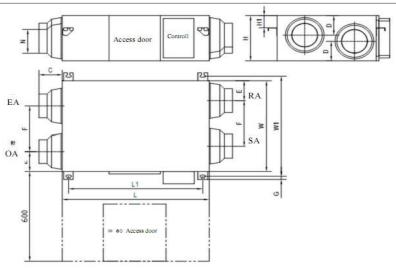
- Airflow from 150-1300m3/h
- · Heat or energy recovery
- Quiet operation
- Double filtersEasy installation to ceilingBy-pass function



EVXPQ-D1.5HP~D10HP

## **SPECIFICATIONS**

	Airflo	w 2 m	2/h2		Extern		E	Enthal	py Ef	ficien	су (9	( <sub>0</sub> )	Ton	np. Eff.	(%)		Noise		Volt.	Current	Input	N. W.
Model	AITIO	W Z 111	3/113	μ	ressu (Pa)	ii e	5	Summ	er	,	Winte	r	Tell	ıр. Еп.	. (70)		NOISE	,	(V)	(A)	power (W)	(Kg)
	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н			(VV)	
EVXPQ-D1.5HP	100	150	150	49	69	80	64	60	60	65	62	62	75	72	72	21	25	27	220	0.52	108	28
EVXPQ-D2.5HP	160	250	250	30	48	60	60	56	56	62	60	60	72	69	69	23	26	29	220	0.55	115	28
EVXPQ-D3.5HP	230	350	350	90	100	120	65	61	61	66	63	63	76	73	73	24	29	32	220	0.85	178	40
EVXPQ-D5HP	330	500	500	30	72	95	62	60	60	63	61	61	74	71	71	25	31	34	220	0.95	200	40
EVXPQ-D8HP	680	800	800	120	125	170	58	55	55	64	57	57	75	68	68	31	37	39	220	2.8	585	60
EVXPQ-D10HP	840	1000	1000	105	120	175	60	57	57	63	61	61	75	69	69	33	38	40	220	3.3	690	79



Model	L	L1	W	W1	Н	H1	N	С	D	E	F	G
EVXPQ-D1.5HP	816	745	554	611	278	75	Ф96	145	120	122	278	21
EVXPQ-D2.5HP	816	745	554	611	278	75	Ф146	130	120	122	278	21
EVXPQ-D3.5HP	900	830	800	857	307	128	Ф146	130	126	140	415	21
EVXPQ-D5HP	900	830	800	857	307	128	Ф196	85	126	140	415	21
EVXPQ-D8HP	1126	1056	834	891	388	169	Ф242	86	157	152	436	21
EVXPQ-D10HP	1129	1060	1216	1273	388	171	Ф242	86	147	152	621	21



#### **MA MEDIUM AIRFLOW SERIES**



EVXPQ-D15TMA~D20TMA EVXPX-D15TMA~D30TMA



EVXPQ-D40MA~D60MA EVXPX-D40MA~D60MA



EVXPQ-D25TMA~D30TMA EVXPX-D25TMA~D30TMA



EVXPQ-D40TMA~D60TMA EVXPX-D15TMA~D30TMA

## **APPLICATION**

Suitable for meeting room, laboratory, office, computer room, dining room, indoor swimming pool, shop and gym places etc.

#### **FEATURES**

- Airflow from 1500-6000m3/h
- · Heat or energy recovery
- Both suspended installation and floor installation available

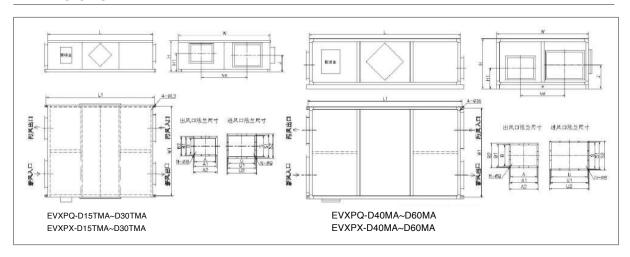
#### **SPECIFICATIONS**

Model	A	Airflow			terna essur	-		nthalp umme	y Eff er		cy (9 Vinter		Tem	p. Eff	. (%)				Volt.	Current	Input power	N. W.
ouc.	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	(V)	(A)	(W)	(Kg)
EVXPQ-D15TMA											7.0	7.0	_,									120
EVXPQ-D15TMA	1000	1500	1500	84	135	163	69	66	66	74	70	70	74	71	71	40	42	45	220	6.6	1380	132
EVXPQ-D20TMA	1000	1500	1500	04	100	100	_		-			_	76	74	74	40	72	15	220	0.0	1000	125
EVXPQ-D20TMA							_	_	_	_	_	_	70	74	74							137
EVXPQ-D25TMA							65	62	62	73	71	71	74	71	71							120
EVXPQ-D25TMA	1200	2000	2000	110	132	176	3	02	02	73	<i>,</i> ,	,	†	7 1	7 1	44	46	49	220	7.4	1550	140
EVXPQ-D25TMA	1200	2000	2000	110	102	170							76	74	74	44	40	43	220	7.4	1550	125
EVXPQ-D25TMA							-	-	-	-	-	-	76	74	74							145
EVXPQ-D25TMA							64	61	61	72	70	70	73	70	70							160
EVXPQ-D25TMA		0500	0500	4.40	470	000	04	01	61	12	70	70	13	70	70	47			000	0.0	4000	195
EVXPQ-D25TMA	2000	2500	2500	140	170	200							74	72	72	47	50	53	220	8.6	1800	165
EVXPQ-D25TMA							-	-	-	-	-	-	74	12	12							200
EVXPQ-D30TMA							63	60	60	71	69	69	73	70	70							165
EVXPQ-D30TMA	2500	3000	2000	150	180	210	03	60	60	71	69	69	73	70	70	48	51	54	220	10.0	2100	198
EVXPQ-D30TMA	2500	3000	3000	130	100	210							74	72	72	40	31	54	220	10.0	2100	170
EVXPQ-D30TMA													74	12	12							208

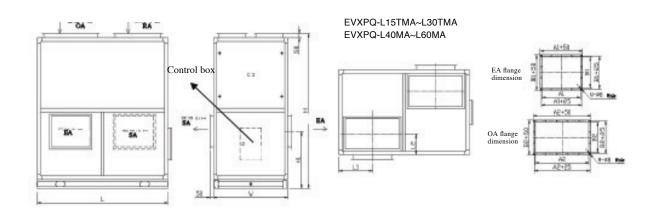
Model	Airflow	External pressure	Enthalpy Eff	iciency (%)	Temp. Eff.	Noise	Volt. V)	Current A)	Rated power	N. W. Kg)
iviodei	2 m3/h3	(Pa)	Summer	Winter	(%)	Noise	voit. v)	Current A)	W)	in. w. Rg)
EVXPQ-D40MA			62	69	70					285
EVXPQ-D40MA	4000	260	02	09	70	59	380	7.6	3000	266
EVXPQ-D40MA	4000	260	_	_	72	39	300	7.0	3000	290
EVXPQ-D40MA			_	_	12					281
EVXPQ-D50MA			61	64	70					360
EVXPQ-D50MA	5000	260	01	04	70	68	380	11	4400	342
EVXPQ-D50MA	3000	260		_	72	00	300	''	4400	365
EVXPQ-D50MA			_		12					362
EVXPQ-D60MA			60	62	68					365
EVXPQ-D60MA	6000	300	00	02	00	70	380	14	6000	342
EVXPQ-D60MA	0000	300			69	70	360	14	0000	370



## **MA MEDIUM AIRFLOW SERIES**



Model		L	L1	W	W1	W2	Н	H1	J	Α	A1	A2	В	B1	B2	S	S1	S2	U	U1	U2	М	Ν
EVXPQ-D15TMA, EVXP	X-D15TMA	1428	1476	1202	1170	600	476	284	260	320	345	370	250	275	300	320	345	370	400	425	450	10	12
EVXPQ-D20TMA, EVXP	X-D20TMA	1428	1476	1202	1170	600	476	284	260	320	345	370	250	275	300	320	345	370	400	425	450	10	12
EVXPQ-D25TMA, EVXP	X-D25TMA	1700	1750	1402	1370	700	600	231	329	400	425	450	250	275	300	350	375	400	500	525	550	10	14
EVXPQ-D30TMA, EVXP	X-D30TMA	1800	1850	1500	1470	730	665	231	363	400	425	450	250	275	300	350	375	400	500	525	550	10	14
EVXPQ-D40MA, EVXP	X-D40MA	2300	2350	1400	1360	680	760	315	355	400	425	450	320	345	370	400	425	450	550	575	600	12	14
EVXPQ-D50MA, EVXP	X-D50MA	2700	2750	1700	1660	830	900	320	395	500	525	550	350	375	400	500	525	550	600	625	650	14	16
EVXPQ-D60MA, EVXP	X-D60MA	2700	2750	1700	1660	830	900	320	395	500	525	550	350	375	400	500	525	550	600	625	650	14	16



Model	L	L1	L2	W	Η	H1	A1	B1	A2	B2	М	N
EVXPQ-L15TMA, EVXPX-L15TMA	1450	372	190	614	1220	428	320	250	450	250	10	10
EVXPQ-L20TMA, EVXPX-L20TMA	1450	372	190	614	1220	428	320	250	450	250	10	10
EVXPQ-L25TMA, EVXPX-L25TMA	1550	398	190	754	1359	510	400	250	550	250	10	10



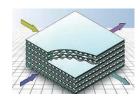
#### **BRIEF INTRODUCTION TO HEAT EXCHANGER**

The plate heat exchanger is one of the air-to-air heat exchangers. The outdoor air and exhaust air are separated by the plates to ensure the air tightness while transferring the heat. It has no movement parts, so it's more reliable and has longer service life.

According to the airflow directions of the heat exchanger, it is categorized into crossflow type, counterflow type, and cross-counter flow type. According to heat recovery function of the heat exchanger, it is categorized into sensible heat and total heat type.

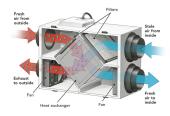


Holtop crossflow plate heat exchanger is made of aluminum foils of 0.12mm thickness. The SA and EA are double folded (five thickness of the material).All connections are completely joint sealing using epoxy resin It is high strength and there has no cross-contamination,.It has the large area of heat transfer and high heat transfer efficiency in the same plate under the same amount of





Total heat exchanger is made of ER paper which is featured by high moisture permeability, good air tightness, excellent tear resistance, and aging resistance. The clearance between the fibers is very small, so only the moisture molecules of small diameter can go through, the odor molecules of larger diameter are unable to pass through it. By this means, the temperature and humidit can be recovered smoothly, and prevent the pollutants infiltrating to the fresh air.

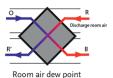


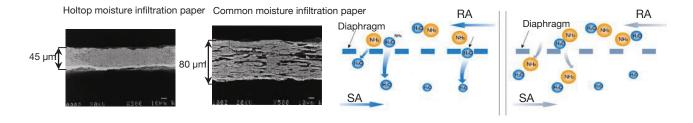


High-efficient counterflow plate total heat exchanger is also an energy recovery for direct air-to-air total heat exchange. Since the two airstreams flow counter and increase the heat exchanging area, it is more efficient than the crossflow heat exchanger and applied to the Holtop ventilators of highefficient series (TLE series).

## Counter-flow plate heat exchanger (sensible heat recovery)

Conventional heat exchange materials





High efficient heat exchange materials

Gas molecules type	Carbon dioxide (CO2)	Ammonia (NH3)	Methane (CH4)	Vapor (H2O)	The clearance of fiber
Diameters ( nm)	0.324	0.308	0.324	0.288	0.3 ( for reference )



#### Standard control panel

#### **HDK-08S**

3 Speeds Switch of normal ventilation and energy recovery Indoor temperature measurement Weekly timer (4 period per day, 7 days per week) filter alaram







Suitable models: EVXPQ-D1.5TLE~D20TLE, EVXPQ-D2THE~D13THE, EVXPQ-D1.5HP~D10HP, EVXPQ- W3TC~W10TC, EVXPQ-G3T

#### HDK-09D

Independent ON/OFF of supply and exhaust fan Indoor temperature measurement Temperature value revision









#### HDK-20B

3 Speeds Independent ON/OFF of supply and exhaust fan Indoor temperature measurement Temperature value revision Time display Optional weekly ON/OFF

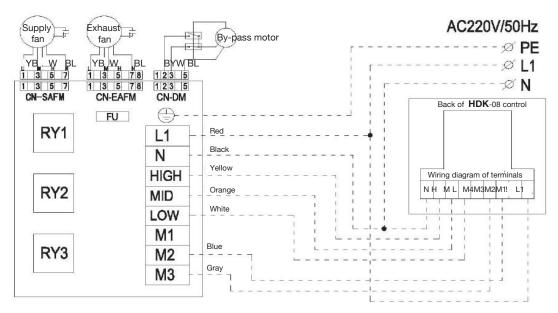






 $Suitable\ models: EVXPQ-D15TD\sim D30TD,\ EVXPQ-L15TD\sim L30TD,\ EVXPX\ D15TD\sim D30TD,\ EVXPX-L15TD\sim L30TD$ 

#### **Control Circuit**

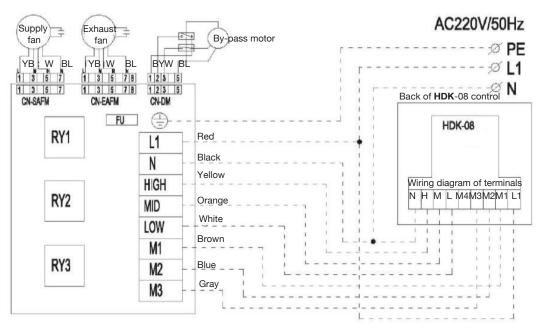


The wiring of the broken lines should be operated by the constructor in installation

Suitable models:

EVXPQ-D1.5TLE~D5TLE, EVXPQ-D2THE~D6THE, EVXPQ-D1.5HP~D5HP

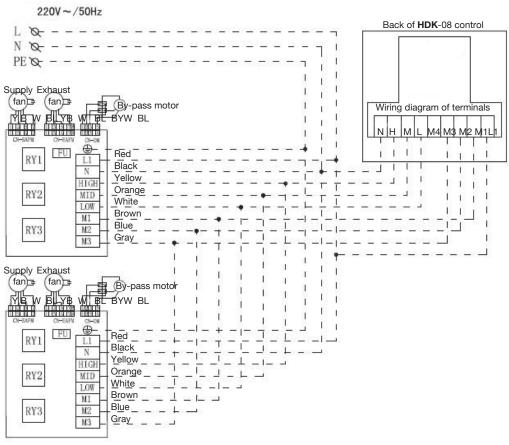




The wiring of the broken lines should be operated by the constructor in installation

Suitable model:

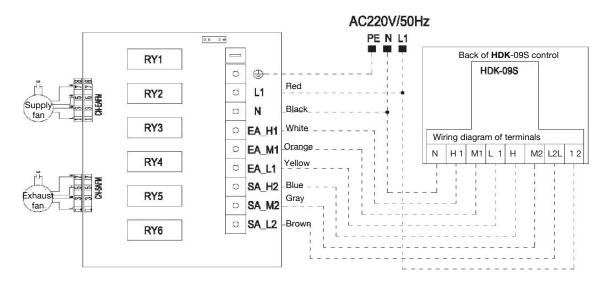
EVXPQ-D6.5TLE~D10TLE, EVXPQ-D8THE~D10TH,EVXPQ-D8HP~D10HP



The wiring of the broken lines should be operated by the constructor in installation

Suitable model: EVXPQ-W3TC-W10TC,EVXPQ-G3T

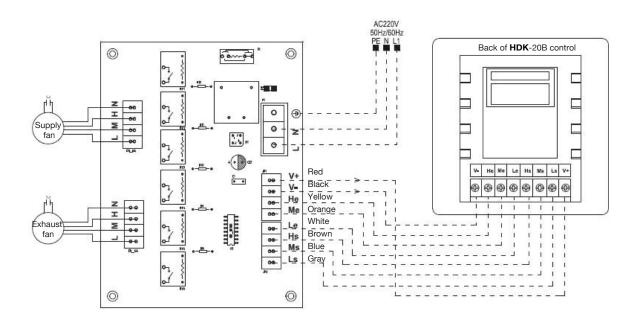




The wiring of the broken lines should be operated by the constructor in installation

Suitable model:

EVXPQ(X)-D15TD~D20TD, EVXPQ(X)-L15TD~L20TD

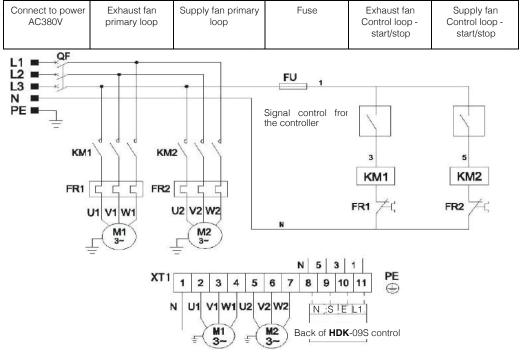


The wiring of the broken lines should be operated by the constructor in installation

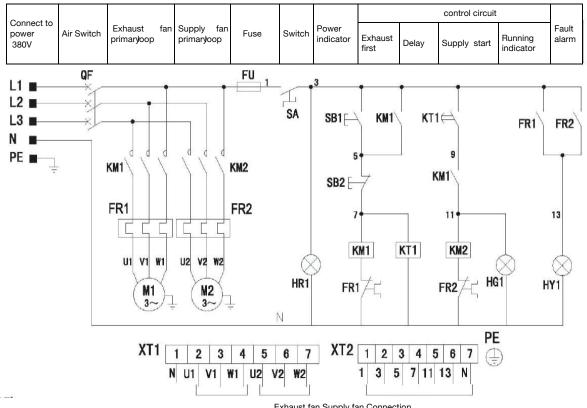
Suitable model:

EVXPQ-D25TD~D30TD, EVXPQ-L25TD~L30TD





Suitable model: EVXPQ(X)-D40D~D60D,EVXPQ(X)-L40D~L60D



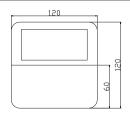
Exhaust fan Supply fan Connection

Suitable model: EVXPQ(X)-L75D~L200D

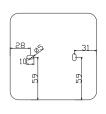




#### **DIMENSIONS**



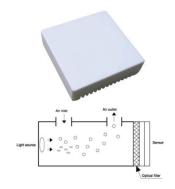






#### Accessories of HDK-10-07

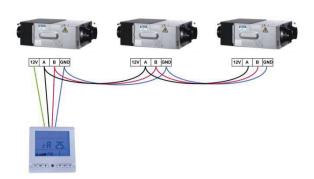




#### **CO2 Sensor**

NDIR infrared CO2 detection

- CO2 concentration detection
- Indoor air quality detection
- Ventilation control system,
- Building and hospital CO2 detection,
- Air conditioner, air purifi er
- Mushroom farm CO2 control.
- NDIR infrared measurement



- Multiple unit control, max. 16 units
  All unit on/off and individual unit on/off available
  Individual unit running status monitor



#### EuroVentus worldwide Contacts

#### Germany: EuroVentus EU

Max-Planck-Str. 5, D-97944 Boxberg, Germany Tel: +49 (0)7930 9211-300 Email: germany@eurovent.us

#### Middle East & North Africa:

EuroVentus General Trading Company. MENA Branch Al Rai Industrial Area, Block-3 Building-1510, Ground Floor, Kuwait. Tel: +965 22091474 P.O.Box: 352 Yarmouk 72654 Kuwait Email: mena@eurovent.us www.euroventus.com

#### Global Support:

info@euroventus.com

