TYP WL

FOR THE REHEATING OF AIRFLOWS IN CIRCULAR DUCTING

Circular hot water heat exchanger for the reheating of airflows, suitable for VAV terminal units Type TVR and mechanical self-powered CAV controllers Type RN or VFC

- For hot water up to 100 °C
- Copper tubes arranged in two rows, with aluminium fins
- Installation in horizontal or vertical ducts independent of airflow direction
- Suitable for circular ducts to EN 1506 or EN 13180
- With lip seal and inspection access
- Maximum water-side operating pressure is 8 bar
- Casing air leakage to EN 15727, class D

Application

Application

- Hot water heat exchanger Type WT for reheating the airflow in circular ducting
- For VAV terminal units Type TVR and for CAV controllers Type RN or VFC
- For hot water up to 100 °C

Description

Parts and characteristics

- Ready-to-install heat exchanger
- Copper tubes arranged in two rows
- Lip seal
- Inspection access
- Tested for leakage

Construction features

- Rectangular casing
- Spigot with lip seal, for circular connecting ducts to EN 1506 or EN 13180
- Maximum water-side operating pressure is 10 bar
- Horizontal water connection
- Water connection with compression ring fittings

Materials and surfaces

- Casing made of galvanised sheet steel
- Copper tubes
- Aluminium fins

INFORMACJE TECHNICZNE

Nominal sizes	100 – 400 mm
Volume flow rate range	10 – 750 l/s
Volume flow rate range	36 – 2700 m^3/h
Thermal capacity	0.25 – 18 kW
Maximum hot water temperature	100 °C
Maximum water-side operating pressure	10 bars
Water-side differential pressure	0.3 – 12 kPa
Static differential pressure	5 – 80 Pa

WL for TVR, RN and VFC

Nominal size	$\dot{V}$		Δp_{st}	PWW 50/40, t_e = 16 °C				PWW 70/55, t_e = 16 °C			
				$\dot{Q}$	t_a	$\dot{m}_w$	Δp_v	$\dot{Q}$	t_a	$\dot{m}_w$	Δp_v
	l/s	m^3/h	Pa	kW	°C	kg/h	kPa	kW	°C	kg/h	kPa
100	**10**	**36**	5	0.25	36.1	21	0.3	0.40	48.5	23	0.5
	20	**72**	10	0.38	31.3	33	0.4	0.62	41.2	36	0.6
	30	**108**	15	0.47	28.8	41	0.5	0.79	37.5	46	0.7
	40	**144**	25	0.55	27.2	48	0.6	0.95	35.2	55	0.8
	45	**162**	30	0.58	26.5	51	0.7	1.02	34.4	59	1.0
125	**18**	**65**	5	0.36	32.0	31	0.3	0.58	42.2	34	0.5
	35	**126**	20	0.51	27.9	44	0.5	0.87	36.2	51	0.8
	50	**180**	40	0.62	26.0	53	1.0	1.09	33.8	64	1.0
	65	**234**	60	0.70	24.8	61	1.2	1.30	32.3	76	1.3
	75	**270**	80	0.76	24.2	66	1.5	1.44	31.6	84	1.5
160	**28**	**101**	5	0.69	36.1	60	1.0	1.17	49.9	68	1.0
	50	**180**	10	1.05	33.1	91	2.0	1.83	45.8	107	3.0
	70	**252**	15	1.35	31.7	117	4.0	2.32	43.0	135	4.0
	95	**342**	25	1.70	30.6	147	5.0	2.85	40.4	166	6.0
	115	**414**	35	1.94	29.7	168	7.0	3.23	38.8	188	7.0
200	**45**	**162**	5	0.97	33.6	84	2.0	1.69	46.5	98	2.0
	80	**288**	20	1.49	31.2	129	4.0	2.54	41.8	148	5.0
	115	**414**	35	1.94	29.7	168	7.0	3.23	38.8	188	7.0
	150	**540**	55	2.29	28.4	199	9.0	3.37	36.8	223	10.0
	180	**648**	80	2.57	27.6	223	11.0	4.30	35.4	251	12.0
250	**70**	**252**	5	1.53	33.8	133	1.0	2.67	47.0	155	1.0
	125	**450**	15	2.35	31.3	203	2.0	4.14	43.0	242	3.0
	180	**648**	25	3.10	30.0	269	3.0	5.29	39.9	308	4.0
	235	**846**	40	3.76	29.0	326	5.0	6.29	37.8	367	5.0
	290	**1044**	60	4.29	28.1	372	6.0	7.20	36.2	420	7.0
315	**115**	**414**	5	2.50	33.7	217	1.0	4.41	47.2	257	1.0
	200	**720**	15	3.82	31.5	331	2.0	6.66	43.1	388	3.0
	285	**1026**	25	5.02	30.4	436	4.0	8.45	40.1	493	4.0
	375	**1350**	40	6.05	29.1	525	5.0	10.11	37.9	589	6.0
	460	**1656**	60	6.89	28.2	597	7.0	11.52	36.4	672	7.0
400	**185**	**666**	5	4.02	33.7	348	2.0	7.08	47.2	413	2.0
	325	**1170**	15	6.24	31.6	542	3.0	10.55	42.4	615	4.0
	465	**1674**	30	8.06	30.1	699	5.0	13.40	39.5	781	6.0
	605	**2178**	50	9.54	28.8	827	7.0	15.89	37.4	927	8.0
	750	**2700**	75	10.92	27.9	947	9.0	18.22	35.8	1062	10.0

$\dot{Q}$: Thermal capacity
PWW: Fully pumped heating system, flow temperature/return temperature
t_e: Inlet airflow temperature
t_a: Outlet airflow temperature
$\dot{m}_w$: Water flow rate
Δp_v: Water-side differential pressure
Δp_{st}: Static differential pressure

Circular hot water heat exchangers for reheating the airflow in air conditioning systems

Dimensions fit VAV terminal units TVR as well as CAV controllers RN and VFC.

Spigot with lip seal, for circular connecting ducts to EN 1506 or EN 13180.

Casing air leakage to EN 15727, class D.

Materials and surfaces

- Casing made of galvanised sheet steel
- Copper tubes
- Aluminium fins

Technical data

- Volume flow rate range: 10 to 750 l/s or 36 to 2700 m³/h
- Thermal capacity: 0.25 – 18 kW
- Maximum water temperature: 100 °C
- Maximum water-side operating pressure: 10 bar
- Water-side differential pressure: 0.3 – 12 kPa
- Static differential pressure: 5 – 80 Pa

WL

WL / 160
1 2

1 Type		2 Nominal size [mm]
WL	Hot water heat exchanger for VAV terminal units TVR and CAV controllers RN and VFC	100 125 160 200 250 315 400