

TS

Air handling units with cooling capacity from 4.85 up to 24.8 kW



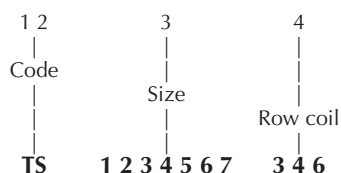
Characteristics

- Compact unit for horizontal installation
- Structure made of Aluzink sheet steel and internally covered with sheets of polyethylene and polyester to obtain improved thermal and acoustic insulation
- Condensate drip tray in stainless steel AISI 304 with insulation
- Coils with aluminium fins and copper pipes
- Statically and dynamically balanced centrifugal fans
- Three-speed electrical motor with running capacitor permanently activated and internal thermal protection
- **NOTE: Possibility to also have the engine with five speed.**
- Transmission system relay card for each speed (excluding the models TS13 and TS16)
- Useful static pressure available for any canalisation
- Large choice of distance commands
- Wide range of accessories to meet varying needs (class G3 air filter, post-heating coils, plenum suction assembly, mixer section, suction grille, delivery flanges with circular outlets or rectangular outlet)

Choice of Unit

By suitably combining the numerous options available, it is possible to configure each model in such a way as to meet the most particular of system requirements.

Field configurator:



Code:

TS

Size:

1, 2, 3, 4, 5, 6, 7

Coil:

3 - 3-row coil

4 - 4-row coil

6 - 6-row coil

Models available:

Standard with 3 speed electrical motor

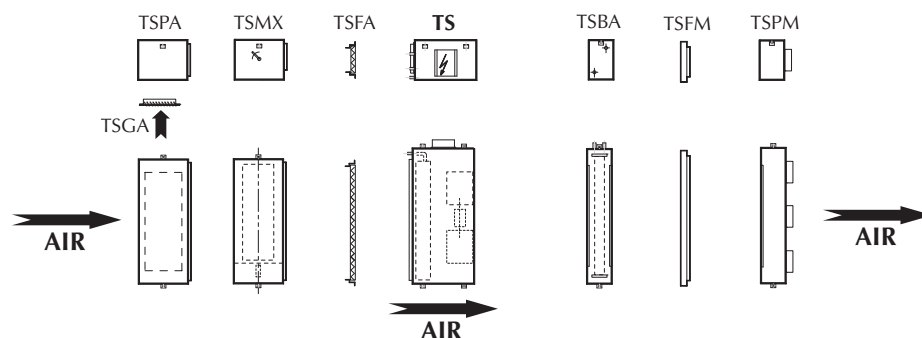
TS 13 - 16 - 23 - 34 - 36 - 43 - 46 - 53 - 56 - 63 - 74 - 76

with 5 speed electrical motor

TS 135V - 165V - 235V - 345V - 365V - 435V - 465V - 535V - 565V - 635V - 745V - 765V

Accessories

- **TSBA:** 2-row coil for post-heating, contained in a delivery installation plenum
- **TSFA:** Class G3 air filter
- **TSFM:** Delivery flange with rectangular section
- **TSGA:** Horizontal suction grille with fixed fins to produce suction from below together with the TSPA accessory
- **TSMX:** Section that mixes the recirculating air and the external air. Calibration of the mix via the damper, motorisation is possible
- **TSPA:** Plenum with suction from below, to which the TSGA grille can be applied
- **TSPM:** Delivery plenum to be connected to the circular channels (with 2, 3 or 4 circular, 200 mm flanges).
- **SWA:** External probe accessory SWA (length L = 6m). It detects the temperature of the room air if connected to the connector (A) of the FMT21 panel. The room air temperature probe, incorporated in the panel, is automatically disabled. It detects the temperature of the water in the system for ventilation consent if connected to the connector (W) of the FMT21 panel. Two SWA probes can be connected simultaneously to the FMT21 panel.
- **Control panels:** the characteristics of the control panels are described on the appropriate card.



Technical data

Model	U.M.	TS 13	TS 16	TS 23	TS 34	TS 36	TS 43	TS 46	TS 53	TS 56	TS 63	TS 74	TS 76
		TS135V	TS165V	TS235V	TS345V	TS365V	TS435V	TS465V	TS535V	TS565V	TS635V	TS745V	TS765V
Cooling capacity	kW	4.85	5.80	7.9	9.6	10.5	11.1	13.3	13.9	16.5	16.6	21.9	24.8
Sensible cooling capacity	kW	3.75	4.45	6.4	7.6	8.3	8.95	10.7	9.8	11.7	13.1	17.8	20.1
Water side pressure drop	kPa	21	9	24	24	16	23	17	32	27	26	28	26
Water flow rate	l/h	830	1000	1360	1650	1810	1910	2290	2390	2840	2860	3770	4270
Heating capacity (70°C)	kW	9.80	12.58	15.50	19.70	21.52	21.60	27.49	25.90	32.89	35.50	46.30	52.06
Water side pressure drop	kPa	12	8	17	20	13	17	13	21	21	20	23	21
Water flow rate	l/h	840	1080	1330	1690	1850	1860	2360	2230	2830	3050	3980	4480
Nominal air flow rate	m ³ /h	930	930	1500	1600	1600	2050	2050	2400	2400	3600	4200	4200
Useful static pressure	(1) Pa	90	55	100	85	45	115	75	105	70	120	115	75
TSFA filter pressure drop	(2) Pa	13	13	11	12	12	13	13	11	11	16	25	25
Coil rows	n°.	3	6	3	4	6	3	6	3	6	3	4	6
Coil water connections	Ø"	G 3/4"	G 1"	G 3/4"	G 3/4"	G 1"	G 3/4"	G 1"	G 3/4"	G 1"	G 1"	G 1"	G 1 1/4"
Maximum water temperature	°C	120	120	120	120	120	120	120	120	120	120	120	120
Ventilation speed number	bar	15	15	15	15	15	15	15	15	15	15	15	15
Motors	n°.	1	1	2	2	2	2	2	2	2	2	2	2
Fans	n°.	3	3	3	3	3	3	3	3	3	3	3	3
Ventilation speed number	n°.	1	1	1	1	1	1	1	1	1	1	1	1
Motors	W	225	225	345	345	345	550	550	550	550	600	830	830
Motor maximum power	A	1	1	1,9	1,9	1,9	2,6	2,6	2,6	2,6	3,9	5,5	5,5
Maximum input current	dB(A)	50	50	51	52	52	55	55	55	55	58	58	58
Sound pressure level	V/ph/Hz	230V/1/50Hz											
Power supply													

Cooling

Room air temperature 27°C b.s./19°C b.u.; Water inlet temperature 7°C; ΔT water 5°C.

Heating (70°C)

Room air temperature 20°C b.s.; Water inlet temperature 70°C; ΔT water 10°C.

(1) Rated capacity (maximum speed) without air filter

(2) Air filter (TSFA accessory) at rated capacity

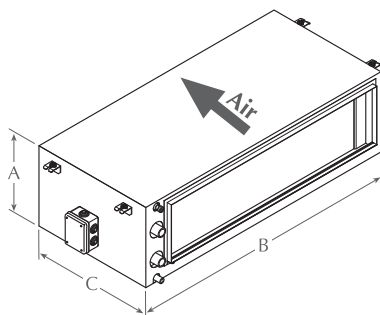
Compatibility of accessories

TS	TSBAx	TSFAx	TSFMx	TSGAx	TSMXx	TSPAx	TSPMx	FMT10	PXAE	WMT	SWA**
10	10	10	10	10	10	10	10	10		05	
20/30	20/30	20/30	20/30	20/40	20/30	20/30	20/30	21		10	
40	40	40	40		40	40	40			06	
50	50	50	50	50/60/70	50	50	50				
60/70	60/70	60/70	60/70		60/70	60/70	60/70				
13 - 16	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓(x 1-2)
23	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓(x 1-2)
34 - 36	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓(x 1-2)
43 - 46	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓(x 1-2)
53 - 56	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓(x 1-2)
63	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓(x 1-2)
74 - 76	✓*	✓*	✓*	✓*	✓*	✓*	✓*	✓	✓	✓	✓(x 1-2)

* = The code of these accessories is obtained by substituting the letter "x" with the number indicating the corresponding size of the unit

** = SWA accessories are matched with FMT21 control panels.

Dimensions (mm)



		TS13	TS16	TS23	TS34	TS36	TS43	TS46	TS53	TS56	TS63	TS74	TS76
Height (A)	[mm]	296	296	296	296	296	325	325	325	325	375	375	375
Width (B)	[mm]	645	645	1000	1000	1000	1100	1100	1345	1345	1345	1345	1345
Depth (C)	[mm]	520	520	520	520	520	600	600	600	600	600	600	600
Weight	[kg]	25	27	35	38	42	42	46	48	52	56	61	67,5

Aermec reserves the right to make all modification deemed necessary for improving the product at any time with any modification of technical data.

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293730
www.aermec.com