



Casing Design:

The S60 units have a frame made of galvanised steel profiles and corner connectors made of aluminium or glass-fibre reinforced plastic. The aluminium corner connectors can be supplied optionally with or without an M20 thread for attaching e.g. crane eyes. Frame profiles and aluminium connectors are sealed against each other by EPDM seals. The panels of the enclosure are double-skinned with 60 mm wall thickness. In the basic version, 1.0 mm thick galvanised sheet steel is used for the inner and outer panels. Alternatively, the enclosures are available with powder-coating (standard RAL 7035), in V2A 1.4301 or with aluminium cladding AIMg3. The rock wool used as thermal and sound insulation is non-flammable. The panels

are screwed to the hollow frame profile from the outside. The connections of the enclosure parts are designed in such a way that the insides are smooth-surfaced. The units up to size 1313 can be provided with an edged base frame made of 3 mm thick galvanised sheet steel. For larger sizes, welded steel base frames in galvanised design are available as an alternative. The units of the S60 series are certified according to the RLT energy efficiency label and EUROVENT. The suitability for hygienic requirements is proven by VDI6022.

Mechanical and thermal performance (according to EN 1886, 2009):

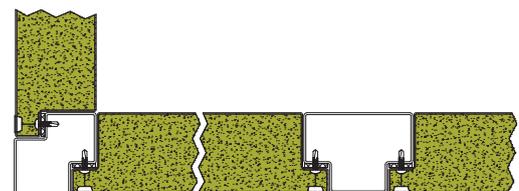
Thermal transmittance (coefficient of thermal transmittance U) [W/m²K]	Thermal bridging factor k_b [-]	Filter bypass leakage	Casing leakage				
			Test pressure -400 Pa [l/(sm²)]	Test pressure +700 Pa [l/(sm²)]			
1,00 (T2) (M)	0,47 (TB3) (M)	F9 (M)	L1 [0,09] (M)	L2 [0,24] (M)			
Sheet thickness of outside sheet / inside sheet [mm]	Insulating material / density [kg/m³]	Casing stability [mm/m]	Weight of side panels [kg/m²]	Fire protection class of the insulation according to DIN 4102			
1,0 / 1,0 (reinforced 1,25 / 1,25)	Rockwool / 40-90	D1 (R)	22	A1			
Octave band for casing sound insertion loss (M)							
Frequency [Hz]	125	250	500	1000	2000	4000	8000
Sound insertion loss index [dB]	21	24	27	27	26	27	39

Dimensions and Air Volumes:

		Unit Depth (size, external and internal dimensions)									
		07	10	13	16	20	22	25	28	32	35
		770 mm	1.090 mm	1.390 mm	1.720 mm	2.020 mm	2.260 mm	2.570 mm	2.870 mm	3.180 mm	3.480 mm
		640 mm	960 mm	1.260 mm	1.590 mm	1.890 mm	2.130 mm	2.440 mm	2.740 mm	3.050 mm	3.350 mm
Unit Height (size, external and internal dimensions)	28	Size			-	2028	2228	2528	2828	3228	3528
	2.870 mm	Air Volume [m³/h] at 2m/s			-	37.300	42.000	48.100	54.100	60.200	66.100
	2.740 mm				-						
	25	-	-	1325	1625	2025	2225	2525	2825	3225	3525
	2.570 mm				-						
	2.440 mm				-						
	22	-	-	1322	1622	2022	2222	2522	2822	3222	3522
	2.260 mm				-						
	2.130 mm				-						
	20	-	1020	1320	1620	2020	2220	2520	2820	3220	3520
	2.020 mm				-						
	1.890 mm				-						
	16	-	1016	1316	1616	2016	2216	2516	2816	3216	3516
	1.720 mm				-						
	1.590 mm				-						
	13	0713	1013	1313	1613	2013	2213	2513	2813	3213	3513
	1.390 mm				-						
	1.260 mm	5.800	8.700	11.400	14.400	17.100	19.300	22.100	24.900	27.700	30.400
	10	0710	1010	1310	1610	2010	2210	2510	2810	3210	-
	1.090 mm				-						
960 mm	4.400	6.600	8.700	11.000	13.100	14.700	16.900	18.900	21.100	-	
07	0707	1007	1307	1607	-	-	-	-	-	-	
770 mm				-							
640 mm	2.900	4.400	5.800	7.300	-	-	-	-	-	-	
07	0704	1004	1304	-	-	-	-	-	-	-	
480 mm				-							
350 mm	1.600	2.400	3.200	-	-	-	-	-	-	-	

Panel connection:

The panels are screwed to the connecting profile from the outside. To achieve a visually good finish, the screws are concealed on the outside of the enclosure. A sealing strip is glued between the panels and the profile.


Module connection:

The modules are connected differently depending on the size. The supplied self-adhesive sealing tape must be applied to one of two modules to be connected. Folded gusset plates are mounted in the corners at the factory. The modules are

held together at these with screws supplied. Then additional module connectors are placed along the edges of the unit cross-section. Finally, module joint cover plates are mounted all around.

